Contents

머 리 말

위대한 령도자 **김정일**원수님께서는 다음과 같이 말씀하시였다.

《외국어는 실지로 써먹을수 있게 배워주어야 합니다. 학생들이 비록 외국어공부를 많이 하였다 하여도 그것을 실지 써먹을줄 모르면 외국어를 소유하였다고 볼수 없습니다.》

경애하는 수령 **김일성**대원수님과 위대한 령도자 **김정일**원수님께서 외국어학습과 관련하여 주신 교시와 말씀을 높이 받들고 4학년영어교과서는 영어에 대한 지식과 그 활용능력을 키울수 있도록 집필되였다.

교과서는 5개 주제의 20개과로, 마지막과는 총복습으로 편성되였다.

매 주제는 4개과로 되여있는데 첫번째와 두번째 과에서는 주제내용에 기초하여 토론과 론쟁, 본문읽기 및 듣기를 진행하면서 해당한 어휘와 문법지식을 배우게 된다.

세번째 과에서는 상식자료를 취급하면서 영어를 익히며 마지막과에서는 앞에서 배운 3개과에 대한 어휘 및 문법지식을 복습하게 된다.

이 교과서는 또한 교수 전과정에 학생들을 위대한 수령님과 경애하는 장군님의 위대성, 선군사상의 불패성과 생활력, 우리식사회주의제도의 우월성과 우리 당의 조국통일방침으로 철저히 무장시키는데 응당한 주목을 돌렸다.

학생들은 선군시대 강성대국건설위업실현에 이바지할수 있는 쓸모있는 혁명인재가 되기 위하여 배우고 또 배워야 한다.

Let Us Arm Ourselves Firmly with the Revolutionary Ideas of the Great Leader Comrade Kim Il Sung!

The Tower of the Juche Idea

Theme A Exploration and mystery

Unit 1 Exploration

Topic and language

Samjiyon Grand Monument

1 *Discussion* On top of Korea

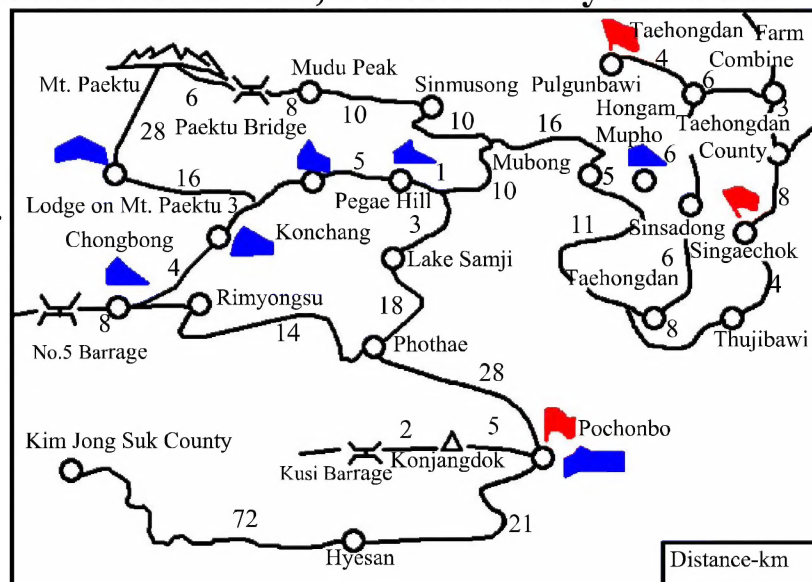
1.1 What's it like?

Look at the picture. Do you know where it is?

What can you see there? What do you learn there?

Tell the class your ideas.

1.2 A study tour to the Mt. Paektu area, a revolutionary battle site

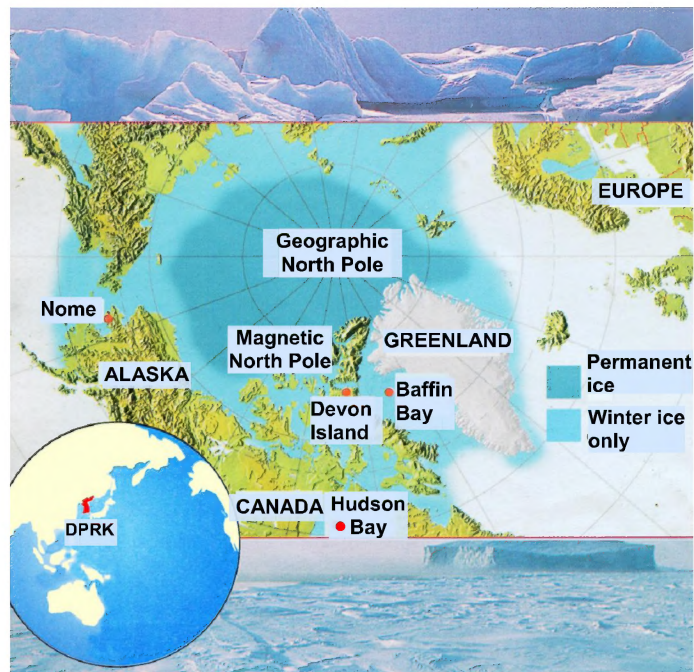
Imagine you are going to make a trip by train or bus from Pyongyang to the Mt. Paektu area. What do you know about the Mt. Paektu area? Work with a partner and look at the map. Make some notes about these things.

A possible route
The things we should take
Possible problems

Tell the class your ideas.

We can go from ... to ...
We should take the Reminiscences of the Anti-Japanese Guerrillas.
We should take ...
We might get lost. We might ...

2 *Reading* The Franklin Expedition, the 1st part

2.1 England, 1845

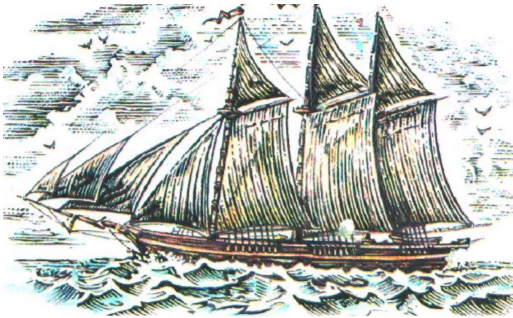
In 1845, John Franklin left England with 134 men. He wanted to find a way to the northwest of Canada.
Look at the list of supplies on Franklin's ships.
Which things are the most important, do you think? Why?
Look at the 'Reward' notice.
What happened to Franklin, do you think?

2.2 What happened to them?

Work with your neighbour. Read about the Franklin mystery. Write the correct paragraph number for each sentence.

Paragraph □ says what the British government did.
Paragraph □ says why Franklin went to the Arctic.
Paragraph □ says what some sailors found.
Paragraph □ says what Franklin took with him.
Paragraph □ says who saw Franklin for the last time.

Look at the list of supplies on Franklin's ships and the 'Reward' notice. Can you find a mistake in the information in the text?

The story is also on the cassette.

The mystery of the Franklin Expedition

Many years ago, explorers wanted to find a way by sea from Europe to China, via Alaska. In 1845, John Franklin left England with 134 men to look for a route through the Arctic.

Franklin's ships had everything they needed. They had enough food in tins for three years and thousands of litres of lemon juice to stop disease. They also had two libraries with 3 000 books, excellent maps, scientific instruments, musical instruments and a new invention: a camera.

Supplies on Franklin's Ships

- 8 000 tins of meat, soup and vegetables
- 1 600 kilograms of soap
- 4 250 kilograms of chocolate
- 1 000 kilograms of tea
- 62 000 kilograms of flour
- 1 225 kilograms of candles
- 3 200 kilograms of tobacco
- 4 200 litres of lemon juice

Franklin and his men left England on May 19th, 1845 and they sailed without problems across the Atlantic towards Canada. When Franklin arrived at Baffin Bay in July 1845, things were going very well for the expedition. On July 26th, some sailors saw Franklin's ships when they were entering the bay. That was the last time that anyone saw Franklin and his men alive.

The British government became very worried when they heard nothing from Franklin. They sent expeditions to look for him, but the expeditions all returned without any news. The government offered £20 000 to anybody who could help Franklin or anybody who had information about Franklin. Nobody came with information.

Toronto Globe 4 April 1850

The Franklin Expedition

REWARD

£20 000

For any person who can help the Franklin Expedition

Then, in August 1850 some sailors found the first signs of the Franklin Expedition while they were searching on Devon Island: some old food tins, some papers, and, something very strange, the graves of three men. The men all died in January 1846 while Franklin

was waiting in Baffin Bay for the ice to melt. But why did they die? The three men were all young and three deaths in the first months of the expedition were very strange. What happened to them? And where were the ships and all the other sailors? The mystery of the Franklin Expedition was growing stronger ...

Inside the text

A *Comprehension* **Notes about the expedition**

Can you complete these notes about the Franklin Expedition?

The Franklin Expedition
Franklin left England in 1845.
.... three years.
.... Baffin Bay.
.... £20 000.
In 1850, some sailors found ......
This was very strange because ...
...

B *'anybody / any ...'* **Anybody can do it**

In Grades 2 and 3, you learned how you can use 'any' in negative sentences, like this:

There wasn't ***any*** sign of Franklin's ships.

You can also use 'any' in positive sentences to mean 'not a particular person/thing/place'.

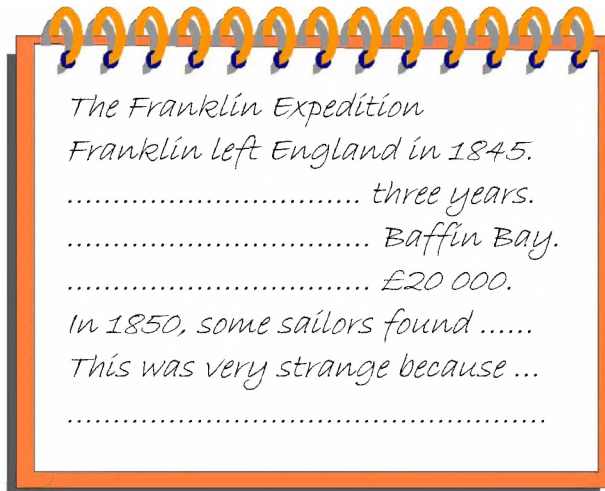
Some sailors saw Franklin in July 1845. That was the last time ***anyone*** saw Franklin.

Choose the correct word or words to complete each sentence.

anybody anywhere anytime anything any book anywhere

(1) .... can learn to speak a foreign language.
(2) This plant can grow ....
(3) Tomorrow I'm having a party at home. You can come to my house at .... Bring .... that you have.
(4) In the library you can borrow .... that you like.
(5) Come in! Sit down. You can sit .... you want.

3 *Writing* **At sea**

You are a sailor on Franklin's ship. It is July 1845 and you are in Baffin Bay. Note down your answers to these questions.

What are you doing now?
How do you feel? How is the food?
What is happening on the ship?
Are things going well or badly? Why?
What do you do when you aren't on duty?

Now, using your notes, write part of a diary.

We left England two months ago.
The journey is going very well/badly.
The ship is …
At this moment I am …
When I am not on duty I …
The food …
We eat …

4 Language focus **Past continuous**

4.1 In Korean

How do you say these sentences in Korean?

When Franklin arrived at Baffin Bay in July 1845, things were going very well.

Some sailors saw Franklin's ships when they were entering the bay.

Underline the verbs in each sentence. What do you notice about the form of the verbs? How are they different? Can you find some more examples in the text in Ex. 2?

4.2 What's it for?

In Grades 2 and 3, you learned four main verb forms:

The *Present simple* for descriptions or habits:

Kim Chol ***lives*** in a big house.

The *Past simple* for actions that are finished:

Cave people ***lived*** thousands of years ago.

The *Present continuous* for actions that are happening now:

Look! It***'s*** rain***ing***!

or for future plans:

I***'m*** work***ing*** tomorrow.

'going to' to talk about the future:

I***'m going to*** visit my uncle next week.

Another verb form is the *Past continuous*.

They found the graves while they ***were*** search***ing*** on Devon Island.

When do you think you use it? Look at the examples and tell the class your ideas.

The men died while Franklin was waiting in Baffin Bay.
It was raining yesterday when I went for a walk.
I saw an accident while I was walking in the town.

Which actions are the background for other actions? What verb form do you use after 'while'?
You can also say 'when' instead of 'while'.

They found the graves ***when*** they were searching on Devon Island.

4.3 What were you doing?

Work with a partner. Ask each other questions. Invent some details, like this:

A: I broke my brother's computer last night.
B: How? What were you doing?
A: I was sitting on it!
B: What did you do about it?
A: I told him. He wasn't very happy.

Some ideas:

I swallowed a bee yesterday.
Sun Hui lost her watch last night.
Yong Chol fell off a ladder last week.
I saw a mouse last night.

5 *Say it clearly!* /ə/ and /ɒ/

Practise the /ə/ and /ɒ/ sounds.

Listen and say these sentences.

Where **were**/wə/ you last night?
I was **watching**/ˈwɒtʃɪŋ/ television.

Listen and say /ə/ clearly.

were Decemb**er** yest**er**day nev**er**
I've got **a** cat. How **are** you? Where **were** you last Septemb**er**?

Now listen and say /ɒ/ clearly.

w**a**s w**a**sh bec**au**se **o**ff **o**ffice r**o**ck r**o**cket w**a**tching
He w**a**sn't in the **o**ffice today bec**au**se he w**a**s ill.

6 *Reading* The mystery of the Franklin Expedition, the 2nd part

Read (and listen to) the next part of the Franklin mystery.

Why do you think so many men were dying when they left the ships? Why did Franklin take the wrong route, do you think?

The last message

In England, many people wanted to know more about Franklin. Some people said that Franklin and his men were living with the Eskimo people or 'Inuit'. Other people said that Franklin was certainly dead.

Jane Franklin was John Franklin's wife. She wanted to know exactly what happened to her husband. In July 1857, she sent an expedition to the Arctic. A year later, on an island in Baffin Bay, they discovered one of Franklin's sailors – ten years too late. He was lying in a boat at the edge of the sea – dead.

Near the dead man, they found a small stone house. Inside the house they found a note. It was the last message from the Franklin Expedition.

> April 25th 1848
> We arrived here in September 1846 – nineteen months ago. Our ships are trapped in the ice and we cannot move. The men are dying – 25 men are already dead. Captain John Franklin died on June 11th 1847. We left the ships two days ago. Our only chance now is to walk.

So, Franklin and his men died in the Arctic – three years after they left England. Without any food, their only chance was to walk to their deaths in the ice. The Franklin mystery was solved.

But was it solved? Why were so many sailors dying when they left the ships? Franklin had excellent maps of the area. Why did he take the wrong route? There were still questions to answer ...

7 *Fluency* All about ... exploration

7.1 Search!

Look at the pictures and the texts. Can you find answers to these questions?

(1) When did the great leader Marshal **Kim Jong Il** initiate an expedition to the Mt. Paektu area?
(2) How did the first people in America arrive there?
(3) Why are there pyramids in Latin America, according to Thor Heyerdahl?
(4) Why do people speak Portuguese in Brazil today?
(5) How many people lived in Australia in 1642?

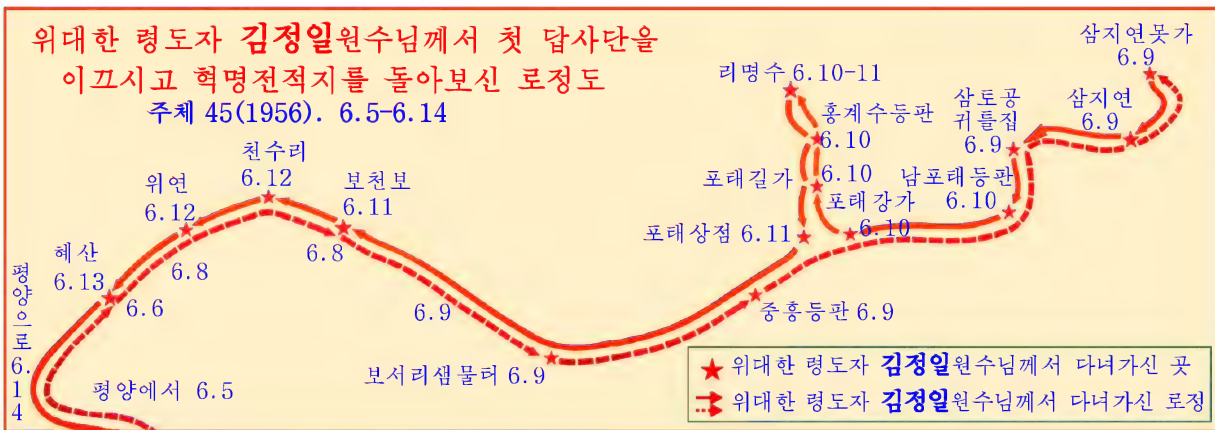
Write some more 'search' questions for other students.

7.2 When did it happen?

Read through each text and make a note of the dates.

For example:

- June 5th, Juche 45(1956): A visiting team left Pyongyang.
- 40 000 years ago:

Along the eternal route

The great leader Marshal **Kim Jong Il** at the age of 14 initiated an expedition to the Mt. Paektu area on May 2nd, Juche 45(1956), and on June 5th, Juche 45(1956) left Pyongyang leading a visiting team of Pyongyang Secondary School No. 1.

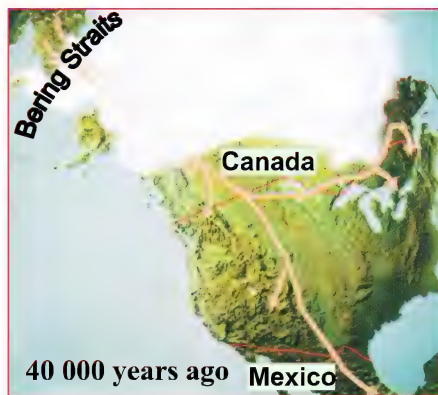
Soon after visiting the Pochonbo area, his expedition party marched towards Lake Samji. Until that time the course of expedition to the revolutionary battle sites was limited to Pochonbo, and the route to the areas of Mt. Paektu and Lake Samji was not yet laid out.

The road was rough but the respected General ordered the ranks to march on. The respected General said in a thoughtful tone: **"How many of such beautiful and magnificent mountains are there in this world?**

"Our Mt. Paektu represents the highest and largest in the world particularly because it is the mountain that symbolizes the victory the Marshal won by crushing the Japanese imperialist enemies."

These are really meaningful words. The ranks went away into the distant forest, singing revolutionary songs. This was how the route of visit to revolutionary battle sites of Mt. Paektu was laid out.

It was a historic event in carrying forward the pure tradition of the Korean revolution originated from Mt. Paektu and advancing the socialist cause of the Korean people along the road of Juche.

The first people in America

The first people in America probably arrived there about 40 000 years ago, during the ice age. Because of the ice, the sea level was lower than it is today and there was dry land between Asia and North America. People crossed over the land and travelled south into North and South America. Later, the climate changed and the ice melted. The level of the sea rose and the 'land bridge' disappeared.

Pyramids in Egypt and in America – why and how?

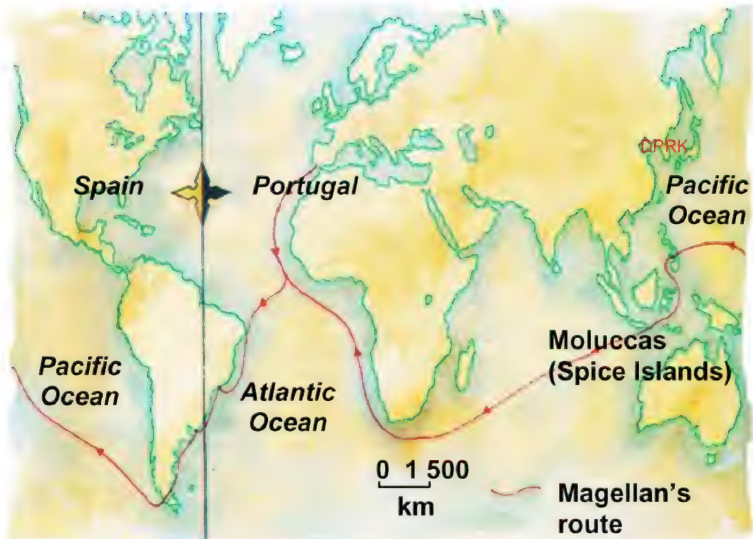
Did people travel from Egypt to America 4 000 years ago? Thor Heyerdahl, a Norwegian explorer, thinks so. To test his idea, Heyerdahl made a simple boat, similar to the ancient Egyptian boats.

Then, with eight men on his boat, he sailed from Africa. Two months later he arrived in Barbados. Heyerdahl showed that it was possible for the ancient Egyptians to cross the Atlantic. He thinks that this might explain why there are pyramids in Egypt and Latin America.

Pyramids in Egypt

Pyramids in Mexico

The first journey around the world

Most explorations were for two reasons: power and money. In 1494, Spain and Portugal agreed to divide the non-Christian world between them. They drew a line on a map and said that everything to the west belonged to Spain, everything to the east belonged to Portugal. (For this reason, people in Brazil speak Portuguese today.)

The King of Spain wanted the Moluccas (or 'Spice Islands') so he sent Ferdinand Magellan to prove that they were in the west. Magellan found a way around South America into an enormous ocean. He called the ocean the 'Pacific'. His ships then continued back to Spain. They became the first ships to go all around the world.

The first people in Australia

People usually say that Europeans 'discovered' Australia in the 1600s. In fact, when Abel Tasman arrived there in 1642, about 300 000 aboriginal people were already living there. They came to Australia from Southeast Asia about 12 000 years before Tasman.

The Aborigines lived in Australia completely undisturbed until James Cook arrived in 1770. Cook declared that the eastern half of Australia was British. Not long after that, the first people from Britain arrived and the life of the Aborigines changed forever.

8 *Decide...*

Choose an exercise.

8.1 *Writing* **How did it change our world?**

Look at the texts and pictures in Ex. 7 again. What happened as a result of each event? Use your imagination and general knowledge and write a result for each event a–f.

Events

a. The great leader Marshal **Kim Jong Il** initiated an expedition to the Mt. Paektu area in June Juche 45(1956).
b. People crossed into America from Asia.
c. People perhaps travelled from Egypt to America.
d. Spain and Portugal divided the world in half.
e. Magellan went around the world.
f. Cook went to Australia.

For example:

Results

a People from home and abroad make visits to the Mt. Paektu area.
b There are native Americans (Indians) in America now.

Can you think of more explorations and their result today?

8.2 *Writing* You decide!

Decide what you want to do and ask your teacher. You could:

— write a poem about the barked trees with slogans on in the Chongbong Bivouac.
— write a newspaper story from 1642.
— write a diary for a day on Thor Heyerdahl's boat.
— write about some other explorations.
— write a conversation between Magellan and the king.
— write an exercise for other students.
— write a puzzle.
— write some questions.

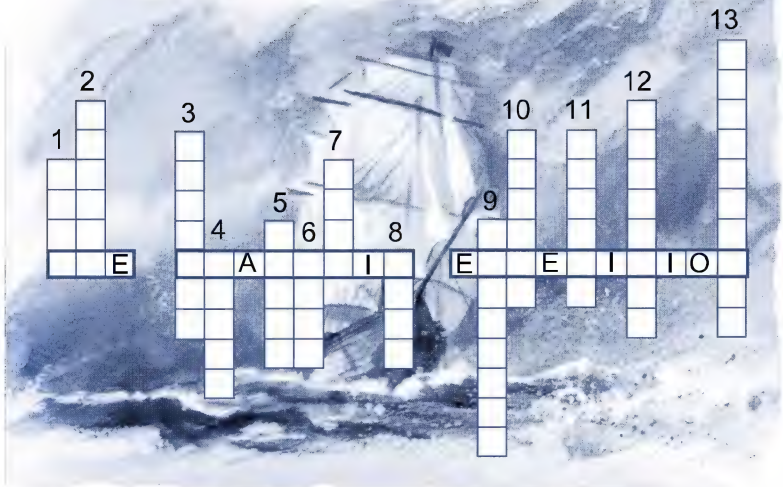
Supplementary Exercises

1 *Vocabulary* What's the word?

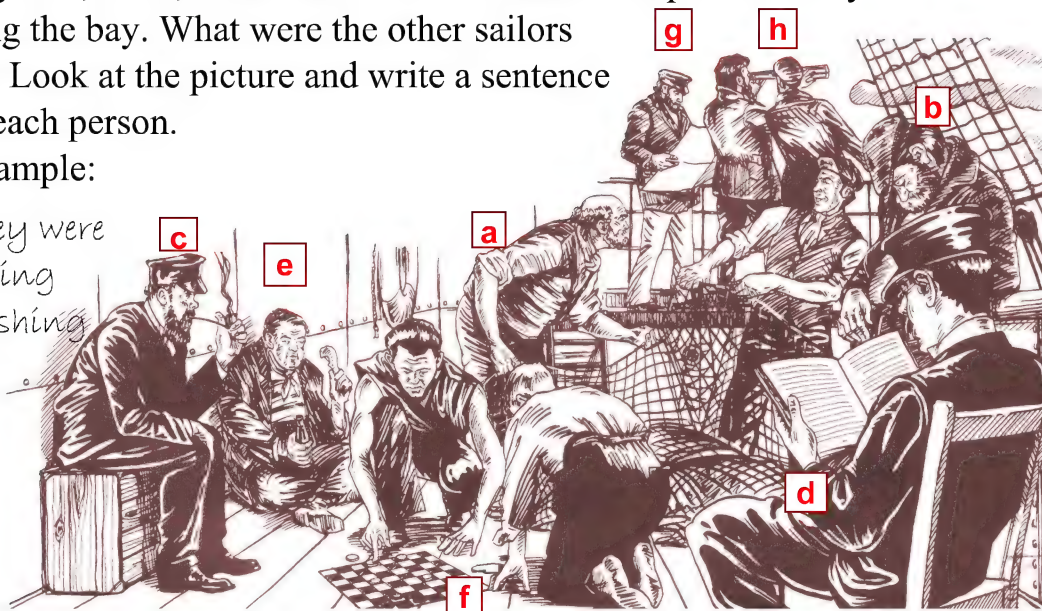
Can you write the correct word in the puzzle? Many of them are in Ex. 7.

(1) When ice gets warm, it begins to _____.
(2) To look for something very carefully
(3) The enormous ocean that Magellan sailed across
(4) Franklin was looking for a ______ through the Arctic.
(5) The people who live in the Arctic

(6) The _____ of Spain sent Magellan to the Spice Islands.
(7) Magellan's ships were the first ships to _____ around the world.
(8) A short message
(9) Thor Heyerdahl was a Norwegian _____.
(10) Britain is in the continent of _____.

(11) In 1494, Spain and Portugal agreed to _____ the non-Christian world between them.
(12) Heyerdahl thought that the ancient Egyptians sailed across the _____ to America.
(13) The first people in Australia

2 *Past continuous* **What were they doing?**

On July 26th, 1845, some sailors saw Franklin's ships when they were entering the bay. What were the other sailors doing? Look at the picture and write a sentence about each person.
For example:

a They were checking the fishing nets.

3 *any ...* **Any way you want**

Choose the correct word to complete each sentence.

any way   anywhere   anything   any time   anyone

(1) Tomorrow is a holiday so I can get up at .... I like.
(2) ‘What do you want for dinner?’ ‘............! I eat everything.’
(3) .... you go in the world you can find people.
(4) The last time .... saw Franklin was in July 1845.
(5) You can cook potatoes .... you want. You can fry them, roast them, boil them and bake them.

4 *Reading* A race to the South Pole

4.1 Tragedy in Antarctica

The story of Captain Robert Scott in Antarctica is one of the saddest stories in the history of exploration. Read about what happened to Scott and his men.

A race to the South Pole – and tragedy

Captain Robert Scott wanted to be the first person to reach the South Pole. In 1911, he planned a trip to Antarctica, but while he was preparing to leave, he heard about Roald Amundsen. Amundsen, from Norway, also wanted to be the first person to reach the South Pole. The race was on.

Scott started the trip on November 1st, 1911. With him, he had eleven men, ponies, dogs, snow tractors and sledges. They were going to cross nearly 3 000 kilometres of ice – the longest journey by sledge in history.

Problems in the ice

Very soon, Scott’s expedition had terrible problems. The wind was blowing very hard and all the ponies died from the cold. Then, on December 31st, the snow tractors broke down and seven of the men had to go back. Scott and four other men continued across the ice. Scott didn’t know it, but two weeks before that, on December 14th, Amundsen had already arrived at the South Pole – while Scott and his men were fighting their way across the ice.

At the South Pole

On January 18th, 1912, Scott finally reached the South Pole – when Amundsen was already sailing home. At the Pole, Scott found the Norwegian flag and a letter from Amundsen. Tired and weak, Scott and his men started their return journey, but while they were crossing the ice, one of the men fell and died. Another man died a few days later. The other three men tried to continue but the cold was too much for them. On March 29th, 1912, Scott and his men all died in the ice – only 18 kilometres from their camp.

Amundsen thought that the trip to the South Pole was going to make him famous. Instead, Scott became the hero.

4.2 What was happening?

What was happening when each of these things happened? Write a sentence about each one.

(1) Scott heard about Amundsen.

....

(2) The ponies died.

....

(3) Amundsen arrived at the South Pole.

....

(4) Scott arrived at the South Pole.

....

(5) One of the men fell.

....

5 *Writing and speaking* Talk to Lewis

Write your answers to Lewis' questions. Then talk to him on the cassette.

LEWIS: Hi there. How are you?
YOU: ....
LEWIS: I'm fine. Last night I was reading about the Franklin Expedition. It's a very sad story, isn't it?
YOU: ....
LEWIS: Where were they going when they disappeared?
YOU: ....
LEWIS: Oh yes, that's right. Franklin was an explorer, wasn't he? Do you know the names of any other explorers?
YOU: ....
LEWIS: What did they do?
YOU: ....
LEWIS: Oh yes, I think I've heard that before.
YOU: ....
LEWIS: Would you like to be an explorer?
YOU: ....
LEWIS: Why?
YOU: ....
LEWIS: Well, I don't think I want to be an explorer. It's too dangerous! I must go now. Talk to you later. Bye!
YOU: ....

Unit 2 Mysteries solved?

Topic and language

1 *Discussion* Mysteries that you know

Are there any famous mysteries in our country? What mysteries do you know about Mt. Paektu? How high is **Jong Il** Peak from the bottom of the front yard of the native home to the top?
The great leader Marshal **Kim Jong Il** met our soldiers on November 24^{th}, Juche 85(1996) at Panmunjom. Do you know about the mysterious fog that enveloped Panmunjom?
Do you know any mysteries from the other countries?
Tell the class your ideas.

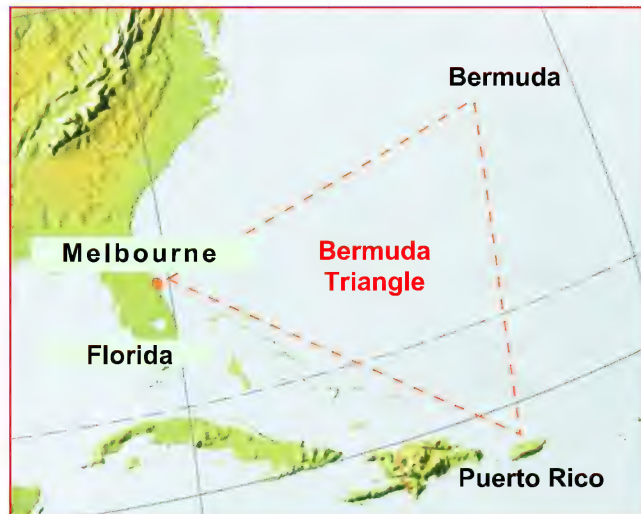
2 *Reading and writing* Some more mysteries

2.1 Mysteries from the world of travel

Read about each mystery. What is the mystery in each one, do you think? Find the answers to these questions.

Which stories are from the Atlantic Ocean?
Which stories are about mysteries at sea?
Which stories are about mysteries in the air?
Which story is the most mysterious, do you think? Why?

THE MYSTERY OF THE BERMUDA TRIANGLE

The Bermuda Triangle is an area in the Atlantic Ocean. Some years ago, many aeroplanes disappeared when they were flying through the area. Ships also disappeared or sank when they were sailing there. Today, many people say that the area has a special, magical force and that it is very dangerous. They are frightened of going into the area because they say something might happen to them.

MYSTERY IN THE AIR

The *Hindenburg* was an airship that flew from Germany to America. In 1936, it made over ten successful trips but then in 1937, a terrible accident happened.

When it was arriving in America, it suddenly exploded into flames. Thirty-six people died in the accident. Why did it explode? Where did the flames come from? It is still a complete mystery why the accident happened.

MYSTERY AT SEA

One of the greatest sea mysteries of all time is the *Marie Celeste.* The *Marie Celeste* was a large ship that sailed from New York in 1872. Two months later, sailors in another ship met the *Marie Celeste* in the Atlantic. They came near the ship to speak to the captain, but they discovered there was absolutely nobody on the ship. Everything else on the ship was completely normal. There weren't any signs of a fight, or illness or any other problems. Where did everyone go?

2.2 What do you think?

Work with your neighbour. Read about the Bermuda Triangle, the *Marie Celeste* and the *Hindenburg* again. Can you explain what happened? Make some notes about your ideas and tell the class. For example:

The Bermuda Triangle
Perhaps the weather is very bad in the area.
Perhaps ...

2.3 A myster poster

You can make a poster for your classroom about other mysteries that you know. Write about them. Add a picture for each one.

3 *Listening* Mysteries solved?

3.1 What are they talking about?

Listen to part of a radio programme. Mike Brown is talking to Lisa Hendon, the author of a book about famous mysteries.

Which mysteries are they talking about?
Does Lisa Hendon think that mysteries really exist?

3.2 Listen again, listen carefully

Listen to each part of the conversation once or twice again. What is Lisa Hendon's explanation for each mystery?
Can you complete these notes about the *Hindenburg* explosion?

When things move through the air, ...
After so many hours in the air, ...
Some hydrogen ...
When the ship came near the landing station, ...

4 *Language focus* Zero conditional: cause and effect

Notice how you can describe something that usually happens. What tense do you use in each part of the sentence?

When things move, they sometimes collect static electricity.

When water reaches 0°C, it freezes.

When water reaches 100°C, ...

When the sun goes down, ...

When winter comes, ...

You can also say what always happens if you do something.

If you throw something up, it comes down.

If you don't eat, you get ill.

If you don't go to school, ...

If you touch something very hot, ...

If you drink petrol, ...

Work with a partner. Can you complete these sentences?
Write the beginnings of some more 'When ...' and 'If ...' sentences. Give them to another pair of students to complete.

5 *Say it clearly!* Falling tone

Practise the falling tone.

If you don't eat, you get ill.

5.1 Go down at the end!

In English you usually go down at the end of sentences that are statements. Listen and say the sentences. Make your voice go down.

If plants don't get water, they die.

When metal gets hot, it expands.

It's very cold today.

She lives in the centre of town.

Read these sentences. Make your voice go down at the end.

One of the greatest mysteries of all time is the *Marie Celeste*.

The *Hindenburg* was an airship that flew from Germany to America.

The Bermuda Triangle is an area in the Atlantic Ocean.

5.2 Up or down?

Listen to these sentences. Do they go up or down at the end? Draw an arrow for each one.

– [1] Where do you live?
– [2] I live in the city centre.
– [3] Is it far from here?
– [4] Yes, it's a long way.
– [5] Do you know where Central Park is?
– [6] Yes.
– [7] It's near there.
– [8] How do you come to school?
– [9] By bus.

Think! What types of sentences go UP? What types of sentences go DOWN?

6 *Language focus* Modals: 'should, might, need, must'

6.1 In Korean

How do you say these sentences in Korean?

I ***should*** see Su Nam tomorrow.
I ***must*** see Su Nam tomorrow.
I ***might*** see Su Nam tomorrow.
I ***need*** to see Su Nam tomorrow.

'Should', 'might', 'need' and 'must' are called 'modal verbs'. Look at the sentences again. What form of the verb comes after 'should', 'might' and 'must'? What form of the verb comes after 'need'?

6.2 What should they do?

Work with your neighbour. Look at this list of people.
What should they do? What should they be able to do?
Write down your ideas about some of them.
Compare ideas with other students.

teachers   children   mothers   fathers   doctors

For example, do you agree with these sentences?

Children should do four hours' homework every night.
Children should do all the cooking and cleaning at home.
Children should go to bed at 8.00.
Children should be able to go shopping.

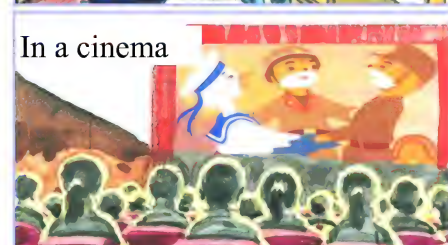
6.3 You mustn't do that!

Be careful! The negative of 'must' isn't 'mustn't'! Look:

I ***must*** do my Maths homework tonight.
I ***don't have to*** do my English homework.

'mustn't' means 'it is not allowed':

You ***mustn't*** drop rubbish in the street.

Look at the pictures of different places. What mustn't you do there? Write about some of them. Compare ideas with other students.

7 *Reading* The mystery of the Franklin Expedition, the final part

In 1984, a scientist solved the Franklin mystery. Why do you think so many sailors died? How do you think the scientist found out?

Read (and listen to) the final part of the Franklin mystery and check your answers.

Mystery solved?

1984, One hundred and forty years later

A scientist in Canada began to think about the first men who died on the expedition. They were all young and they died after only six months at sea. Twenty more men died the next year. There was something very strange about this and there was only one way to discover what it was.

In 1984, he went to Baffin Bay with a team of scientists. There, they opened the graves of the three Franklin sailors. Because of the extreme cold and ice, the bodies were in perfect condition. He took small samples of hair and skin and then put the bodies back into the graves.

Back at the university, he made an incredible discovery. From the hair and skin, he found that the three men died from lead poisoning. They had nearly 100 times more lead in their bodies than normal.

But where did the lead come from? He looked closely at some of Franklin's food tins and found the answer. In those days, tins were closed with lead. Usually, this was not a big problem, but these tins were not made correctly.

Lead was inside the tins. It was not the ice and cold that killed the men. It was the 8 000 tins of food that they were eating.

Lead also affects the brain. It makes it difficult to think clearly. Up in the Arctic, we can now understand why John Franklin made so many wrong decisions.

Supplementary Exercises

1 *Zero conditional* **If and when**

Can you match the two parts of each sentence? Complete ***c*** and ***h*** with your own ideas.

(1) If plants don't get water, ...	***a.*** it goes out.
(2) If you don't wash, ...	***b.*** it smells awful!
(3) If you leave milk in the sun, ...	***c.*** ....
(4) If a car runs out of petrol, ...	***d.*** it expands.
(5) If you put water on a fire, ...	***e.*** they die.

(6) When metal gets hot, ... f. it falls.
(7) When you are asleep, ... g. it rises.
(8) When rubber burns, ... h. ....
(9) When air gets hot, ... i. it goes bad.
(10) When air gets cold, ... j. you smell.

2 *Reading* The mysterious circles

2.1 In the wheat fields

Read about one of the strangest mysteries in England.

The mystery of the circles in the wheat fields

Some years ago in Wiltshire, England, a farmer discovered something very strange in one of his wheat fields – it was an enormous circle, over 20 metres in diameter.

Since then, many other circles have appeared in the same area. They are all very similar. The circles are perfect circles. Around them, the wheat is completely vertical. Inside the circles, the wheat is flat but not broken. It usually goes anti-clockwise. Sometimes, there is another, bigger circle around it where the wheat goes clockwise. Dogs often refuse to go into the circles.

Many other strange things often happen near the circles.

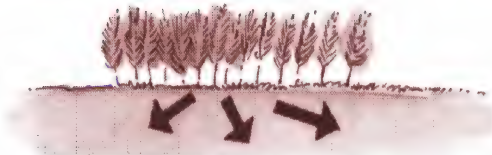
- Five circles appeared in a field after a man and a woman saw very bright lights in the sky.
- A farmer found white jelly in the centre of one circle. University scientists say they don't know what the jelly is.
- A pilot jumped from his plane in the area. The next day they found him – dead – near some circles.
- Two men waited all day and all night in the fields. They didn't see or hear anything unusual, but in the morning they found an enormous circle in front of them.

More circles appear every year, but more than twenty years after the first circle, nobody has a clear idea of where they come from.

2.2 What do you think?

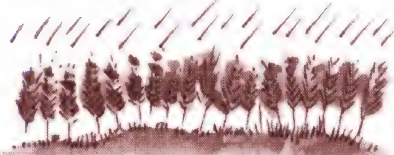
Where do you think the circles come from? Here are some ideas. Tick (√) two or three ideas that you think are possible causes. Put a cross against the ideas that you think are not the causes.

a the wind

b natural magnetic forces

c people playing a trick

d birds

e rabbits or other small animals

f the rain

g cows and sheep

h a helicopter

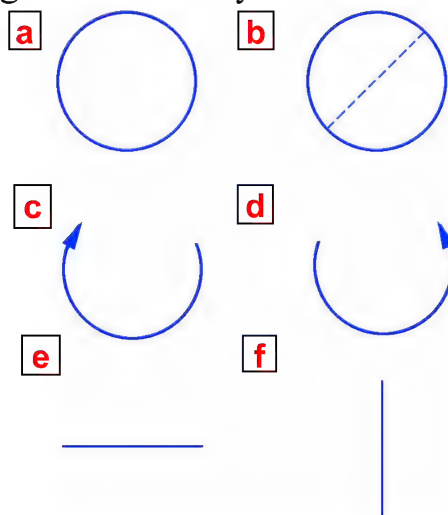
i something else: ....

?

Read the text in S.(*Supplementary*) Ex. 2.1 again and check your ideas. Next lesson compare with other students in your class.

2.3 What's the word?

Can you match each word to the correct diagram?

vertical	anti-clockwise
clockwise	diameter
circle	horizontal

3 *Modals* An exercise you should do

Choose one of these words for each gap.

don't have to might might must must must need need should shouldn't

a. Everyone .... wear a seat belt in a car. In some countries, it is the law and you .... wear a belt.
b. You .... eat a lot of sweet things. It isn't good for you.
c. You .... to eat well or you will be ill.
d. In most countries, they .... pay taxes to the government.
e. When you are an adult, you .... go to school.
f. If you go to the south of England you .... see a circle in a wheat field.
g. I .... go to the shops tomorrow because I .... to buy some things for school.
h. It .... be sunny tomorrow.

4 *Writing and speaking* Talk to Maggi

Find out about a mystery in our country and write your answers to Maggi's questions. Then talk to her on the cassette.

MAGGI: Hi, there. How are you doing?
YOU: ....
MAGGI: At school, we're studying about mysteries at the moment. Can you tell me about a mystery in your country?
YOU: ....
MAGGI: That's interesting. Tell me more.
YOU: ....
MAGGI: When did this happen?
YOU: ....
MAGGI: Where exactly did this happen?
YOU: ....
MAGGI: That's fascinating. Do people know why this happened?
YOU: ....
MAGGI: What a good story! Thanks! I must go now. Bye!
YOU: ....

Unit 3 Who killed the natives in Australia?

Culture matters

1 *Reading* The first Australians

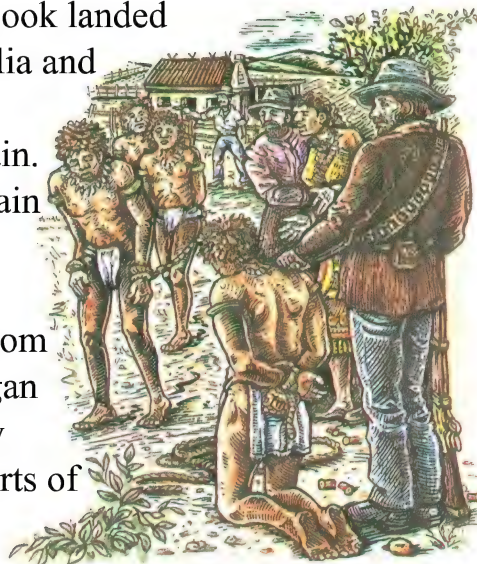
Look at the pictures in this Unit. What do they show? What do you know about them?

Read about the history of Australia and answer the questions.

THE FIRST AUSTRALIANS

There were people in Australia long before Europeans 'discovered' the continent in the 1600s. The 'Aborigines' arrived there about 12 000 years before from Southeast Asia.

They lived by collecting food and hunting with spears and boomerangs. They didn't have metal or pottery, but they had very rich forms of art; painting, song, poetry and mythology. There were over 500 different languages and tribes, with complex systems of trade. The lives of the Aborigines stayed almost the same for thousands of years until the Europeans came to live in Australia in 1778.

In 1770, James Cook landed in eastern Australia and declared that it belonged to Britain. At this time, Britain was looking for a place to send its prisoners and criminals. Australia was the perfect place – far away from Britain. In 1778, the British government began sending the first prisoners to Australia. They sent thousands and thousands to different parts of Australia.

Over time, many free people arrived from Britain and Europe. They built small towns and in the 1850s, they discovered gold. Life was very difficult. There was very little water and the climate was very hard.

The Europeans suffered a lot in Australia but the Aborigines suffered a lot more. The Europeans stole their land and killed thousands of Aborigines. They also brought new diseases with them. In parts of Australia, not one Aborigine survived. Today, Aborigines continue to live in Australia but their culture is under threat. In 1770, there were about 300 000 Aborigines. Now, there are about 120 000. It is becoming harder and harder for them to continue their traditional way of life.

2 *Reading and discussion* The history of Australia

2.1 What do you know?

What do you know about Australia? Answer this quiz.

(1) When did the first people arrive in Australia?

a. about 12 000 years ago ***b.*** about 4 000 years ago
c. in 1642 ***d.*** in 1770

(2) Where did the first people come from?

a. Britain ***b.*** Southeast Asia
c. North America ***d.*** South America

(3) Who are the ‘Aborigines’?

(4) What happened to them?

2.2 Numbers and dates

What do these numbers and dates refer to?
For example:

12 000 years ago: *when people arrived in Australia*

1770 1778 1850 300 000 120 000

2.3 What do you think?

What do you think about what happened to the Aborigines?
Tell the class your ideas.

3 *Listening* Help in the air

In Australia many people live far away from any town. The Flying Doctor

service provides medical help for people living in the 'outback'.

Listen to a radio conversation between Mrs Fraser and Doctor Watmuff.

What's wrong with Mrs Fraser?
What advice does Dr Watmuff give her?
When is he going to see her?

4 *Writing* Decide… Across cultures

Choose an exercise.

4.1 A quiz

Look back at Ex. 2.1. Write a quiz with ten questions about our country. You can test your quiz with other students in your class.

4.2 Our country and Australia

How long does it take to get to Australia from our country? How is Australia different from our country in geography and climate? Do you know a story about James Cook and 'Kangaroo'? When were the 27th Sydney Olympic Games held?

Do some research and find out. Write about the information you find.

Supplementary Exercises

Ways to speaking and listening

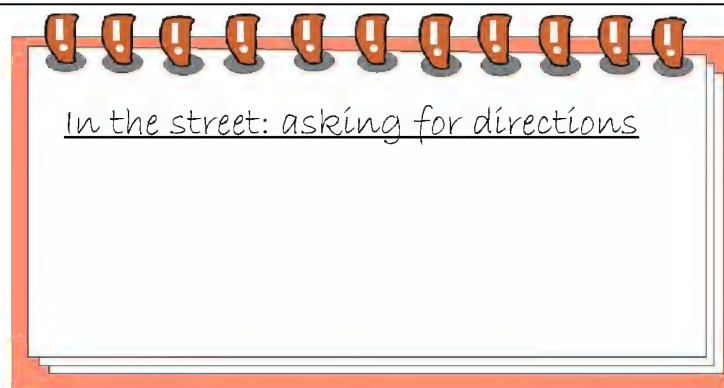
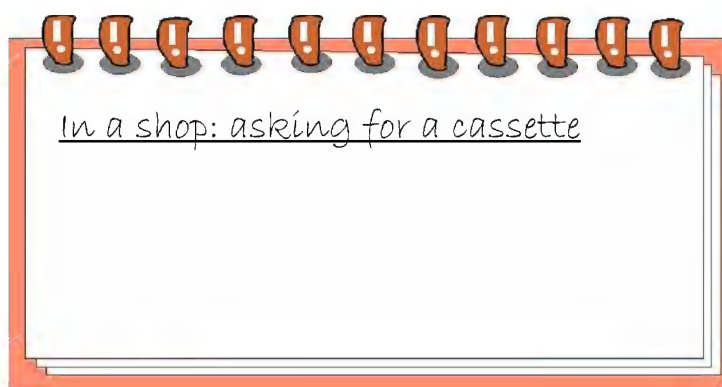
You can see some techniques to help you with speaking and listening in English or in Korean.

1 *Preparation for speaking* Before you speak

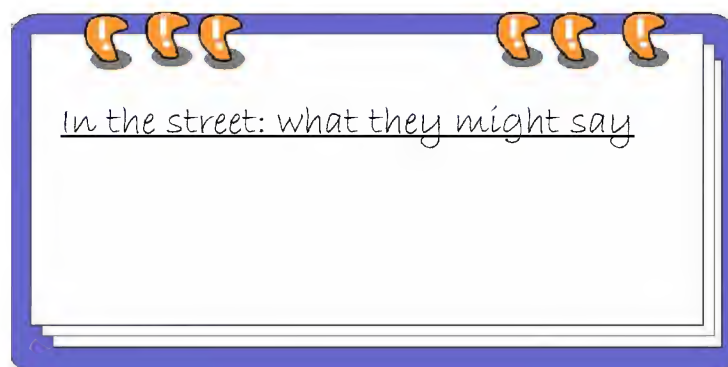
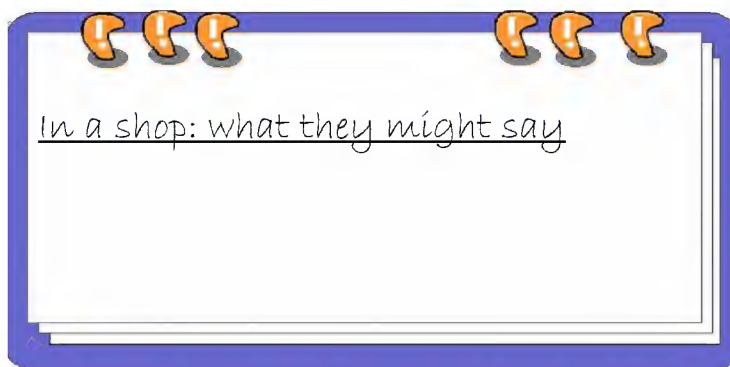
When you want to say something, it is often useful to prepare first! Here are some things that you can do.

1.1 Plan what you want to say

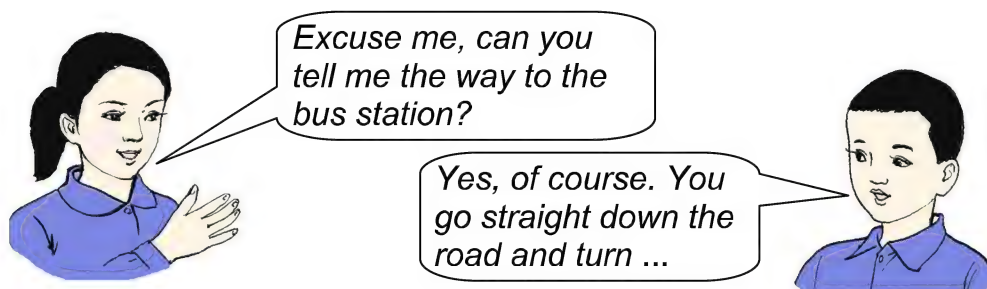
Think about the words that you will need. Use a dictionary and your books to help you. What would you say in these situations?

a. You want to ask someone in the street for directions to the bus station, how far it is and how long it takes to get there.

b. You want to ask in a shop if they have a music CD or cassette that you want and how much it is. If they don't have it, you want to order it.

1.2 Predict what the other person might say

Now think about the language the other person might use. Think about the situations in S. Ex. 1.1. Predict!

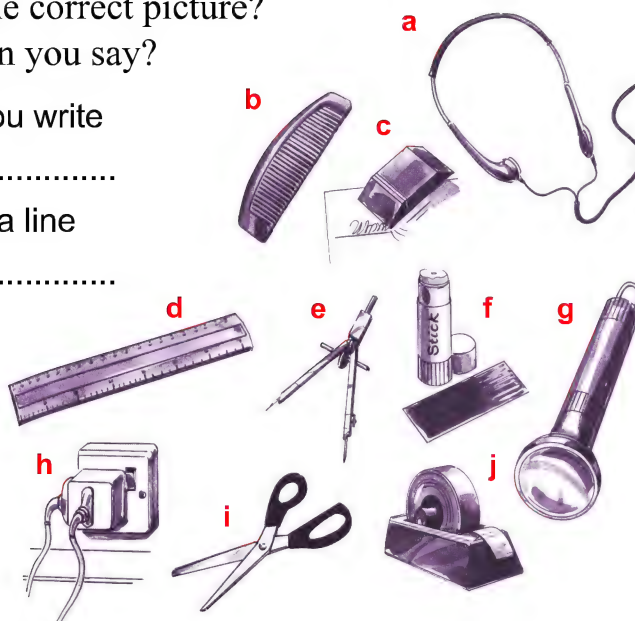
a. Someone in the street gives you directions.

b. In a shop.

Next compare your answers to S. Ex. 1.1 and 1.2 with other students.

1.3 Talk to yourself

Practise what you will say. Take both parts in the conversation. Look at the situations in S. Ex. 1.1 again and talk to yourself!

2 *Explaining* If you don't know the correct word ...

If you don't know the correct word for something, you can explain instead. Can you match the phrases with the correct picture? Five phrases are missing. What can you say?

(1) something to correct what you write
(2) ....
(3) something to help you draw a line
(4) ....
(5) something to draw a circle
(6) ....
(7) something to do your hair
(8) ....
(9) a small light for your hand
(10) ....

a b c d e f g h i j

Revision and test
(Units 1–3)

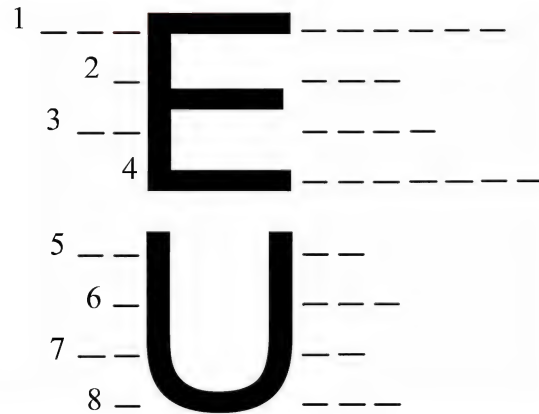
Revision

1 *Vocabulary* What's the word?

1.1 A puzzle

Write the correct word in the puzzle.

1 _ _ _ E _ _ _ _ _ _ _
2 _ E _ _ _
3 _ _ E _ _ _ _
4 E _ _ _ _ _ _ _ _
5 _ _ U _ _
6 _ U _ _ _
7 _ _ U _ _
8 _ U _ _ _

(1) John Franklin was the leader of an Arctic ***e***................. .
(2) Franklin took a lot of ***l***................. juice with him.
(3) An ***i***................. is a large piece of frozen water.
(4) Magellan was an ***e***............. .
(5) Franklin was looking for a northwest ***r***................. to Canada.
(6) Australia exports a lot of ***s***................. .
(7) It is important to eat a lot of fresh ***f***................. .
(8) The liquid that comes from fruit is called ***j***................. .

1.2 What does it mean?

Here are some adjectives from Units 1—3. Each adjective has lots of meanings 'in it'. Look at the table and put a tick (√) if you think it has that meaning.

	means 'not normal'	means 'very good'	means 'not happy'	can describe people	can describe objects
strange	√			√	√
excellent					
worried					
disturbed					
extreme					
perfect					
magic					

2 *Past continuous* The *Hindenburg* in the news

Can you complete the article with the correct form of the verbs?

fly happen look wait film crash
die happen fly come explode start

Listen and check your answers.

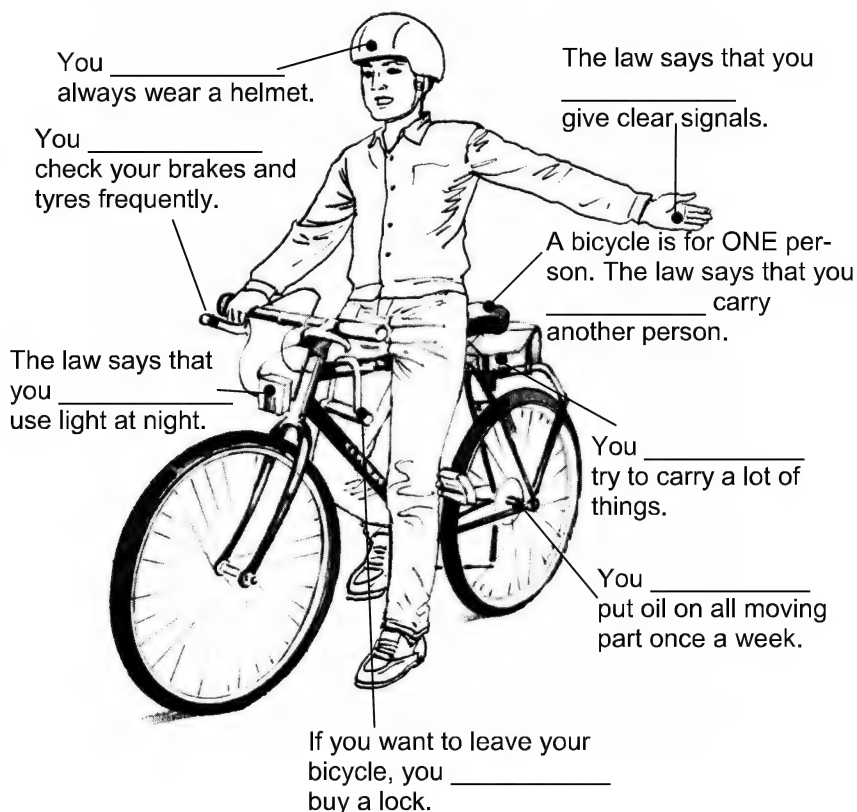
Disaster in the air – the *Hindenburg* explodes

There was panic in New York last night as disaster hit the *Hindenburg*, the transatlantic airship. It [1]was flying from Germany to America when a terrible accident [2]........ . In the airship, people [3]............ out of the window. On the ground, people [4]............ for the airship to arrive. Cameras [5]............ the airship for the news. Suddenly, there was an enormous explosion and the airship [6]........... to the ground in flames. Thirty-six people [7]............ in the accident. Nobody is sure why the accident [8]........... . Some people say that there was a bomb on the airship. Experts, however, say that they think that there was a hydrogen leak. They think that while it [9]............ from Germany, static electricity probably formed around the airship. Then, when it [10]........... near the airship station, a spark jumped to the ground and the hydrogen [11]............ and [12]............ a fire.

3 *Modals* Look after your bike!

Can you complete each sentence with a suitable modal?

must needn't
need to should
don't have to
shouldn't mustn't

BICYCLES ARE GREAT! If you have a bicycle, you ________ walk everywhere. You can get to places much quicker and get exercise at the same time! Also, bicycles are cheap to run! You ______ spend money on petrol. Here are some important points to remember.

4 *Zero conditional* **Look after your health!**

Look at the health leaflet. Can you complete each sentence?

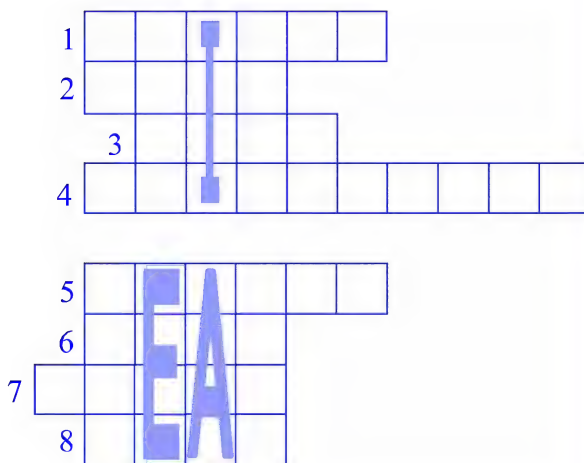
Look after your health!

If you don't sleep enough, ...
If you don't have enough exercise, ...
If you eat too many fatty foods, ...
If you stay in the sun too much, ...
If you drink a lot of fizzy drinks, ...
If you don't wear warm clothes on a cold day, ...

Test yourself

Work with a partner and do this short test.

1 The words you met

Can you write the correct words in the puzzle?

(1) In 1642, there were more than 500 aboriginal ***t***....... in Australia.
(2) The *Marie Celeste* was a ***s***....... .
(3) Franklin took 8 000 ***t***....... of food with him.
(4) He also took many ***s***...... instruments.
(5) Many expeditions went to ***s***...... for him.
(6) Franklin and his men died of ***l***...... poisoning.
(7) Aborigines hunt with a ***s***...... .
(8) Australia exports a lot of ***m***...... .

2 A story from Malta

Can you put the correct form of the verb in the spaces?
(Use the Past continuous and Past simple.)

A STRANGE ACCIDENT

Many years ago in Malta, a young woman [1] was driving(drive) her car near a place called Dingli Cliffs. She [2]........(go) home after a long day at work. Suddenly, she [3]........(see) a man in the road in front of her. He [4]........(wave) his arms in the air. He [5]........(wear) a long black coat and he had a beard. The woman [6]........(stop) the car and she [7]........(ask) the man what he wanted.

The man said nothing. He just pointed towards the cliffs.
The woman [8]........(get out) and she [9]........(look) over the cliffs. Down below, near the sea she could see a blue car. It was upside down and it [10]........(burn).
'Oh, no!' the woman shouted. 'We must call the ambulance!'
She turned round to tell the man but he wasn't there. She looked down the cliffs again and the car wasn't there either! The woman was very frightened. She [11]........(jump) back into her car and [12]........(drive) into the city. In the city, she [13]........(go) straight to the police station.
'What was the man wearing?' asked the policeman.
'He [14]........(wear) a long black coat,' said the woman.
'Did the man have a beard?' asked the policeman.
'Yes,' said the woman.
'What colour was the car?' asked the policeman.
'Blue,' said the woman.
'Was the car burning?'
'Yes,' said the woman.
'I heard strange accidents [15]........(happen) in that dangerous place. But the government has done nothing to prevent them,' said the policeman.

3 'If' and 'when'

Can you complete these sentences with your own words?

(1) If you watch too much television, ...
(2) If you eat too many sweets, ...
(3) If you eat too much boiled rice, ...
(4) If you play with fire, ...
(5) When summer comes, ...
(6) When school starts, ...
(7) When the night comes, ...
(8) When the morning comes, ...

4 You shouldn't do that!

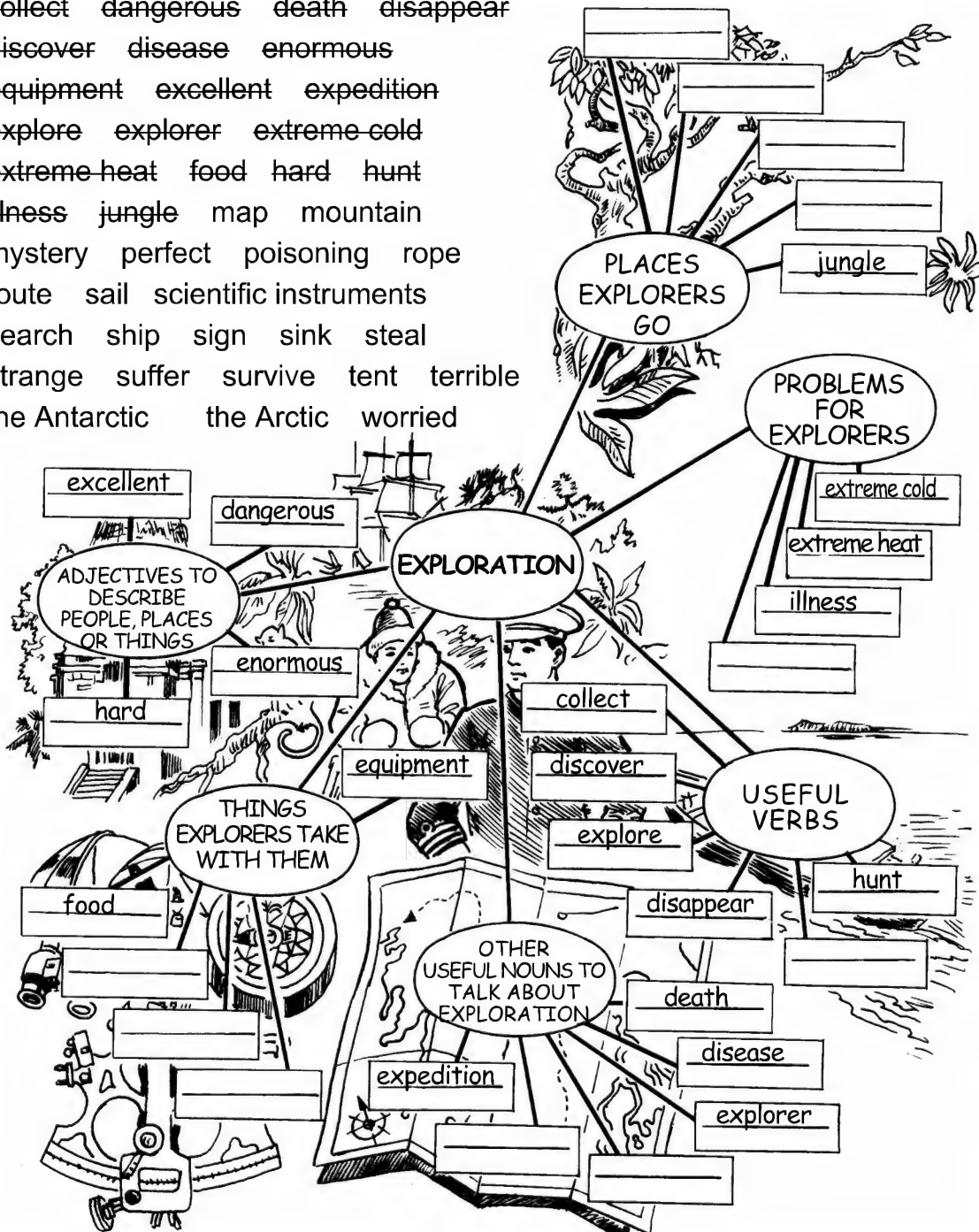
Write 'should', 'might', 'need to', 'needn't', 'must' or 'mustn't' in each sentence.

(1) You .... go to school when you are a child.
(2) We .... go to school on Sundays.
(3) It .... rain tomorrow.
(4) You .... buy a ticket when you go on a bus.
(5) You .... eat a lot of fruit.
(6) You .... look before you cross the road.
(7) You .... sit too near to the television.
(8) You .... do homework after school.
(9) You .... write on the wall.

A vocabulary map (1)

EXPLORATION

Write these words in the correct area of the vocabulary map. (Some words can go in two or more areas.) You can also add the meanings in Korean (in the bottom half of each box). Can you add any more words that you know or any more areas to the map?

collect dangerous death disappear
discover disease enormous
equipment excellent expedition
explore explorer extreme cold
extreme heat food hard hunt
illness jungle map mountain
mystery perfect poisoning rope
route sail scientific instruments
search ship sign sink steal
strange suffer survive tent terrible
the Antarctic the Arctic worried

Theme B Alternatives for the future

Unit 5 Our environment

Topic and language

1 *Discussion* Our changing environment

1.1 The environment today

Look at the picture. The whole of Rungna Islet in the centre of the Taedong River is a pleasure ground. The islet has May Day Stadium and the open-air swimming places. It is covered with beautiful flowers, fruit trees, and useful birds frequent there.

Discuss these questions with your class.

How is the environment changing?
How is it different from the environment of 50 years ago?
What problems are there in the environment today, do you think?
Are there environmental problems where you live?
What are people doing to help the environment?

1.2 What is it?

Look at the pictures in the text in Ex. 2.

Listen. What can you hear? Make a list.

1. ....
2. ....
3. ....
4. ....
5. ....
6. ....

Is each thing good or bad for the environment, do you think? Why?

2 *Reading* People and planet Earth

2.1 Some important concepts

Do you know what these words mean?

pollution   ozone layer   greenhouse effect

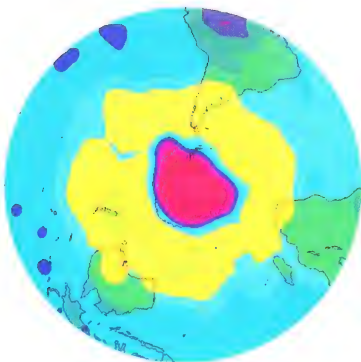
Find the words in the text. What does the text say about them? Tell the class.

PEOPLE *and* PLANET EARTH

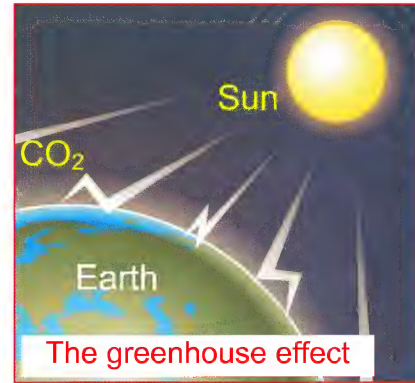
PROBLEMS FOR THE ENVIRONMENT

The Earth is 4 600 million years old. Modern man has lived on the Earth for only 35 000 years but, in that time, we have changed our planet in many ways. Many of the things that we have done are good, but many, many more are not good for the Earth.

Traffic pollution In big cities, cars and buses have polluted the air. Many people in cities now have very bad health problems.

Factory pollution Factories have also polluted the land and the water. As a result, many rivers and lakes are now dead.

The ozone layer Around the Earth, there is a special type of oxygen called 'ozone' (O_3).
Ozone is important because it stops ultraviolet radiation from the sun. Many aerosol sprays and factories destroy ozone and they have made a very big hole in the ozone layer. This means that too much ultraviolet radiation now enters the Earth.
This is very dangerous because it can cause cancer.

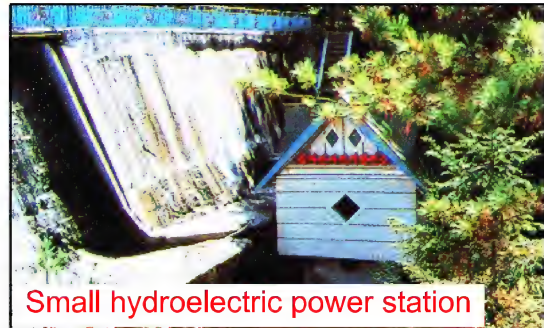
More carbon dioxide Carbon dioxide (CO_2) in the air has increased a lot. (CO_2 comes from burning oil, coal and wood.) This has formed a 'blanket' around the Earth. The heat from the sun cannot escape and so the temperature is rising (the 'greenhouse effect'). This means that the level of the sea is rising and the climate is changing.

The greenhouse effect

Fewer trees All over the world, people have cut down millions and millions of trees. As a result, many types of animals and plants are now disappearing. Trees are also important because they help to produce oxygen and control the climate.

Hope for the Future

These problems are very serious for our future, but we can do something now!

An electric car

In many places, they have already taken action to improve the environment. In some cities, for example, they cannot drive their cars on certain days. In other places they use electric cars and buses. There are also many other things we can do. We've been building medium and small hydroelectric power stations in many local areas in our country. We now also use the wind, the sun and the sea to make electricity.

Small hydroelectric power station

2.2 What have we done?

Read the text and then work with a partner.
Copy and complete the chart below with information from the text.

What has happened?	What is the result?
Cars and buses have polluted the air.	Many people now have health problems.

Compare your notes with other students.

You can listen to the text on the cassette.

2.3 What can we do?

Look at the text again. What can we do about each problem? With your partner, make some notes. Compare ideas with the rest of the class.

Traffic pollution   We can ...

Use your notes to continue the text.

To reduce traffic pollution, we can ...

Inside the text

A Comprehension **Check your understanding**

Are these sentences true or false?

(1) The Earth is 35 000 years old.
(2) Ozone protects us from the sun.
(3) The temperature of the Earth is rising.

Write your answers to these questions.

(1) Why are trees important?
(2) What is ozone?
(3) What is the 'greenhouse effect'?

Check your answers with your teacher. Then write some true/false sentences and some questions for other students.

B Comprehension **Linking ideas**

Look how these ideas link together.

Modern man has lived on the Earth for only 35 000 years but in that time we have changed our planet in many ways.

Find these phrases in the text.

What do the words *like this* link to?

(1) *This* means that too much ultraviolet radiation ... .
(2) *This* is very dangerous ... .
(3) *This* means that the level of the sea ... .
(4) ... *they* help to produce oxygen ... .
(5) *These* problems are very serious ... .
(6) *This* has formed a 'blanket' ... .

3 *Say it clearly!* /ʃn/

3.1 How to say '-tion'

Notice how you usually pronounce '-tion' in English.

pollu**tion** /pəˈluːʃn/ radia**tion** /ˌreɪdɪˈeɪʃn/ informa**tion** /ˌɪnfəˈmeɪʃn/

Read these words. Which one doesn't have the /ʃn/ sound?

pollu**tion** radia**tion** informa**tion** inven**tion** explora**tion** ques**tion** condi**tion** expedi**tion**

Listen and check your answer. Say the words.

3.2 Say some sentences

Say some sentences with the /ʃn/ sound.

There is a lot of pollution in many cities.

Franklin was the leader of an expedition to the Arctic.

The most important invention in history was the wheel.

Say some more sentences of your own with words from Ex. 3.1.

4 *Language focus* Present perfect

4.1 What do you say?

How do you say these sentences in Korean?

Cars and buses have polluted the air.
Aerosol sprays have made a hole in the ozone layer.

These sentences are examples of the Present perfect. You can use the Present perfect to talk about an action *in the past that has a result now.* For example:

Past action	**Present result**
Cars and buses have polluted the air.	Many people now have health problems.
Aerosol sprays have made a hole in the ozone layer.	Too much ultraviolet radiation now enters the Earth.

Look at Ex. 2.2 again. What other examples of 'past action – present result' are there? Can you match these past actions to the correct result?

Past action	**Present result**
I have done my homework …	… so we can eat it now.
I have studied English for ten years …	… so I can watch TV now.
My mother has made a cake …	… so I know a lot of words.

Think of some present results for these past actions.

I have walked 30 kilometres today so …

I have studied a lot English today so …

Note: If you say a definite time, use the Past simple.

Yesterday, I ***walked*** 30 kilometres.

I ***did*** my homework **last night**.

4.2 How to form the Present perfect

The Present perfect has two main parts.

	have/has	+	**past participle**	
I	have		made	a cake.
I	have		done	my homework.
My brother	has		studied	English for ten years.
My friend	has		arrived	.

Words like 'made', 'done', 'studied' and 'arrived' are past participles. 'Studied' and 'arrived' are *regular* past participles, because they end in *-ed*. 'Made' and 'done' are *irregular*. Each verb has three parts. Complete this table.

Infinitive ('dictionary form')	**Past simple** (yesterday, last year, etc.)	**Past participle** (have/has+)
be	was, were	________
break	________	________
cut	________	________
_____	________	done
eat	________	________
_____	________	made
see	________	________

4.3 What have they done?

Work in pairs. Ask each other about the pictures.

What has she/he done? She/He's ...
What have they done? They've ...

Write four sentences about the people in the pictures.

4.4 Experiences

You can use the Present perfect to talk about people's experiences. Work in pairs or in a small group. Ask each other some questions. You can answer:

No, I haven't. *or* Yes, I have.

and say when. (Be careful! Use the Past simple.) For example:

Have you ever eaten ostrich meat? — Yes, I have. I ate it yesterday!
Have you ever been to Russia? — Yes, I have. I went last year.

Have you ever walked 50 kilometres?
Have you ever climbed a mountain?
Have you ever broken an arm or a leg?
Have you ever been in a space rocket?
Have you ever cooked a dinner?
Have you ever played the piano?
Have you ever written a letter in English?
Have you ever sung a song in Chinese?
Have you ever won a prize?
Have you ever been in an aeroplane?
Have you ever swum 1 kilometre?
Have you ever listened to an opera music?
Have you ever been to a concert?

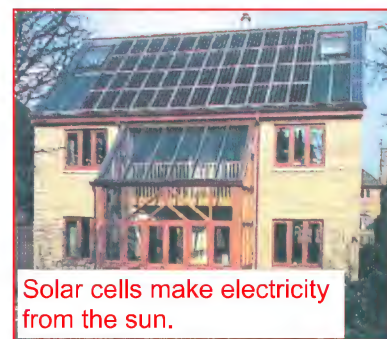
5 *Discussion and listening* Alternative energy

Wind generators use the wind.

5.1 The sun, wind, sea and the Earth

In many countries, they make electricity from coal and nuclear power. People say that coal is very dirty because it makes 'acid rain'. They also say that nuclear power is very dangerous.

Wave generators use the movement of the sea.

Solar cells make electricity from the sun.

There are many alternative ways to make electricity that we can use. Look at the pictures on this page. Do they use these ways where you live? Why can't we use them everywhere? Tell the class your ideas.

5.2 A radio programme

Listen to part of 'Alternatives for tomorrow', a radio programme. Margareta Lindell is talking about alternative energy. Make a list of the problems she talks about. Compare your list with other students in your class.

Solar cells   Wave generator   Wind generator

6 *Fluency* All about ... the environment

6.1 Search!

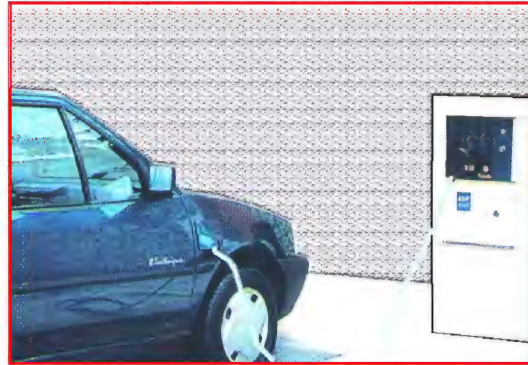
Look at the texts. Find answers to these questions.

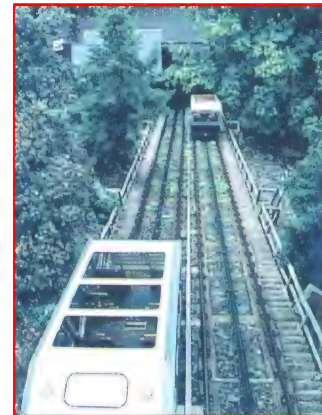
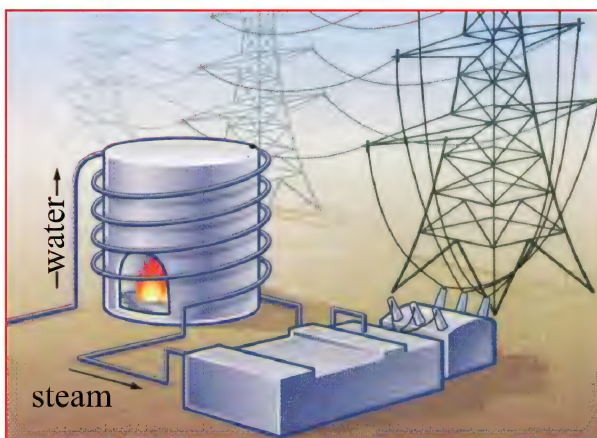
- ***a.*** Which texts are about problems with the environment?
- ***b.*** Which texts are about ideas to help the environment?
- ***c.*** How do they make biogas? What do they do with it?
- ***d.*** How many rubbish power stations are there in the world?
- ***e.*** Where does the acid rain in Sweden come from?

Write some more 'search' questions for other students.

TRANSPORT *for* THE 21st CENTURY

1 A farmer in England used chicken manure to power his car. The car worked but the smell was terrible!

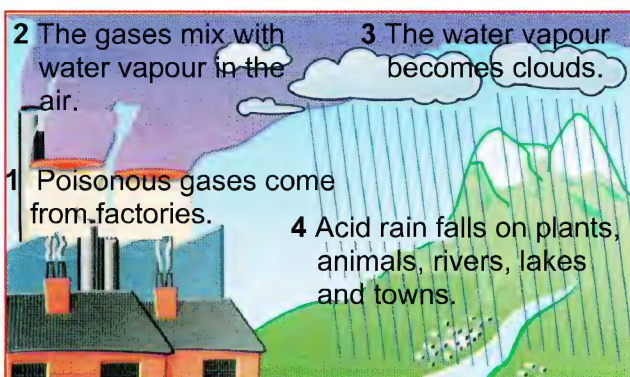
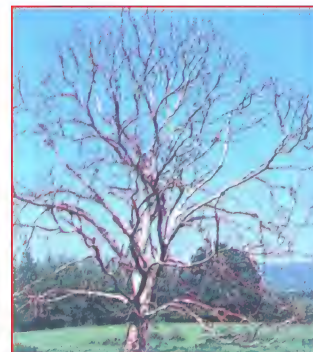
2 In many countries, there are electric cars. They work well but they are slow and cannot run for very long.

3 The Maglev train uses magnets. The magnets push the train forward. It is very quiet, very fast and very clean. Unfortunately, it is too expensive to use a lot.

4 The water train uses water to push a train down a hill and, at the same time, pull another train up the hill.

ELECTRICITY *from* RUBBISH

There are over 350 power stations in the world that make electricity from rubbish.

In one city, a power station burns 400 000 tonnes of rubbish a year. This heats water that makes steam. The steam turns a generator.

In another city, a power station burns 2 250 tonnes a day. It makes electricity for 70 000 people.

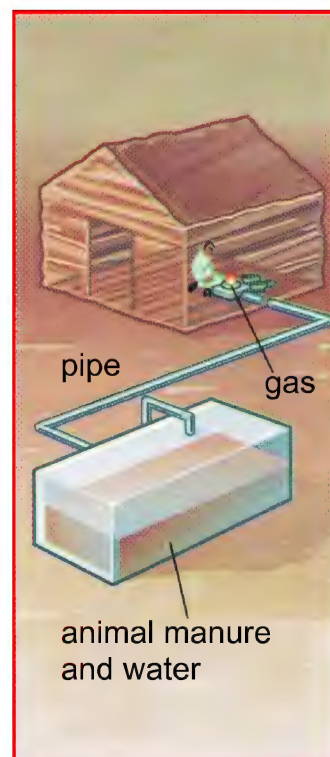
ACID RAIN – what is it?

Acid rain destroys plants, rivers, lakes, and buildings. It comes from sulphur in coal and oil. When they burn, they make sulphur dioxide (SO_2). This mixes with water in the air and becomes sulphuric acid (H_2SO_4).

Acid rain can travel thousands of miles, so pollution in one country can become acid rain for another country. In Sweden, for example, scientists have said that 70% of the sulphur in the air comes from other countries, including Britain.

GAS *from* ANIMALS

In some parts of the world including our country, India and China, they use biogas for cooking. They put water and manure from animals into a large tank. This produces a gas, methane. A pipe takes the gas into the house.

6.2 Important ideas

Read *Transport for the 21st century, Electricity from rubbish* and *Gas from animals.* Why can't they use those ideas everywhere in the world? Think! Make some notes.

(1) The chicken manure car
- it smells!
- you need a lot of chickens
- a terrible smell from a 'chicken manure station'

Compare your ideas with other students in your class.

Read *Acid rain – what is it?* Why are those facts important? Tell the class your ideas.

7 *Decide…*

Choose an exercise.

7.1 Work in pairs. You are on the radio programme 'Alternatives for tomorrow'. Choose a topic from the texts. One of you is the interviewer, the other one is an expert. First, plan some questions.

Why can't we use electric cars everywhere?
What's the problem with the Maglev train?

Practise your interview. Then, act it out for another pair or for the class.

7.2 Decide what you want to do and ask your teacher. You could:

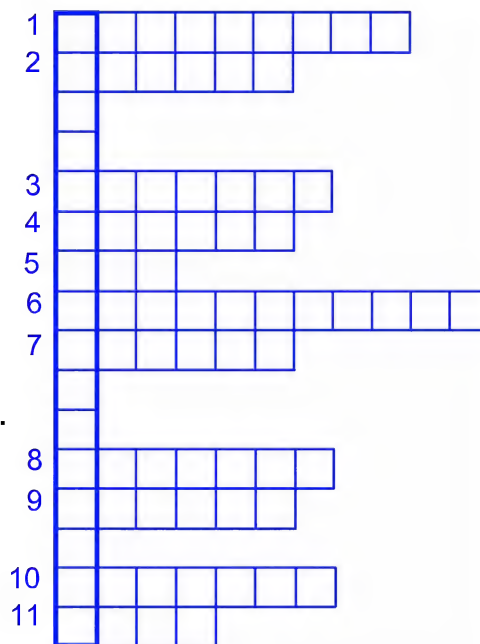
— write an exercise.
— write a dialogue.
— write a poem.
— write a letter.
— make a puzzle.
— write some questions.
— write about the environment.
— make a poster about the environment.

Supplementary Exercises

1 *Vocabulary* What's the word?

Read the clues 1 — 11 and write the correct word in the puzzle. What are the missing letters? What does the puzzle spell?

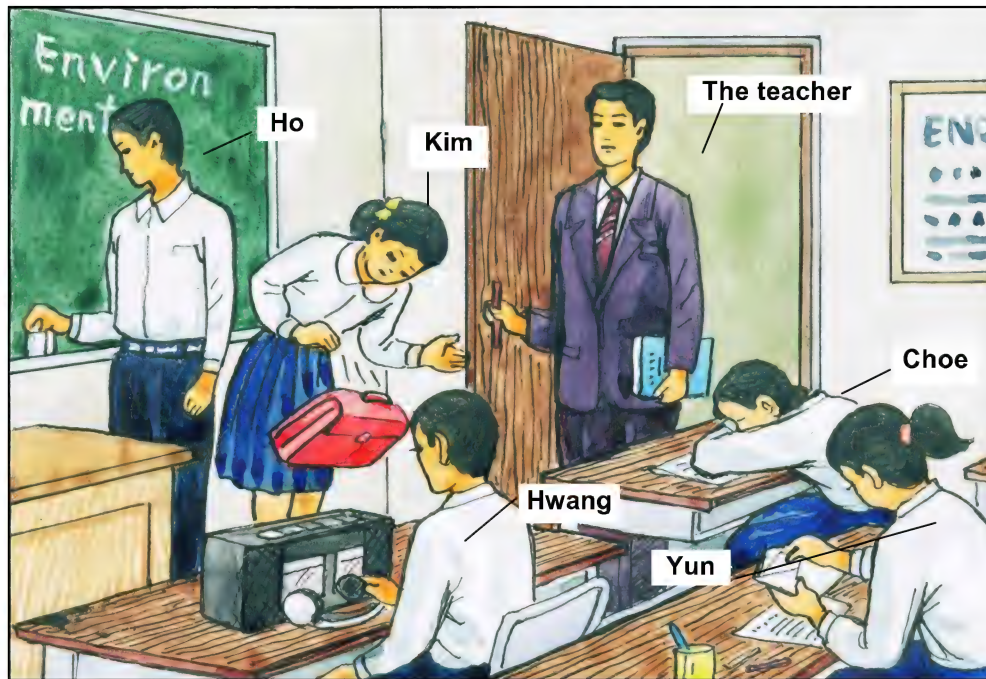
ultraviolet	generator	oil	tree
natural	factory	climate	
reduce	health	sprays	future

(1) A machine that makes electricity
(2) We have to find ways to .... pollution.
(3) Oil, coal, wood, air and water are all .... resources.
(4) Many people in cities now have .... problems.

(5) .... is a thick, black liquid that comes from the ground.
(6) The special type of oxygen around the Earth is important because it stops .... radiation.
(7) Many aerosol .... destroy the atmosphere.
(8) A place where they manufacture things
(9) We must change the way we live. We have to think about the ....
(10) Many scientists say that the .... is changing.
(11) A very large plant that helps to make oxygen

2 *Present perfect* **What a classroom!**

Look at the picture. Is your classroom like this?

What have the students just done? Write a sentence about each person in the picture.

(Notice how you can say 'just' to mean 'a few moments ago'.)

Yun has just written a letter.
Choe ....
Ho ....
Kim ....
Hwang ....
The teacher ....

3 *Present perfect; speaking* **Talk to Lewis**

Write your answers to Lewis' questions. Then talk to him on the cassette.

LEWIS: Hello there! What have you done today?
YOU: ....
LEWIS: I've done a lot today. I've written two letters and I've finished a book. What have you read this week?
YOU: ....
LEWIS: I like reading. I also like watching films. Have you seen any films recently?
YOU: ....
LEWIS: What was the name of the last film you saw?
YOU: ....
LEWIS: Mmmm. I don't think I've seen that film. Was it good?
YOU: ....
LEWIS: Last week I was on holiday. I went to the mountains. Have you ever been to the mountains?
YOU: ....
LEWIS: What places have you visited in your country?
YOU: ....
LEWIS: Oh, really. When did you go there?
YOU: ....
LEWIS: That's interesting. For my next holiday, I'll try to visit those places. I have to go now. Bye.
YOU: ....

4 *Reading and listening* **Look, no wheels!**

Read more about the Maglev train.

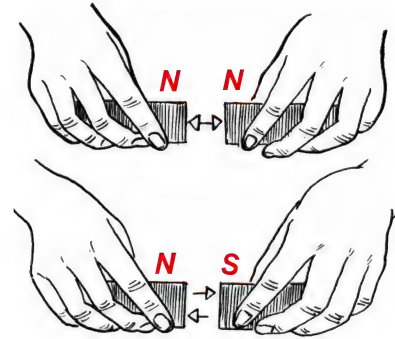
THE FLYING TRAIN

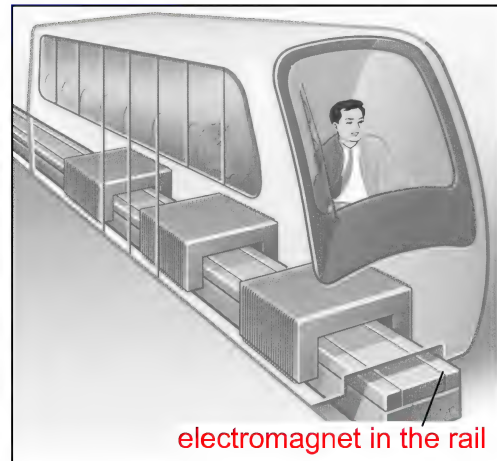
One of the most exciting new types of train is the Maglev train. The Maglev train is very different from normal trains. It does not have any wheels. It uses magnetic levitation to float on the rail. It can travel very fast – over 500 kilometres an hour. It is very quiet and it is very clean. It doesn't have any wheels or any parts that move.

How does it work?

The secret is that it uses magnets in a new type of motor. Have you ever tried to push two magnets together? If you hold them one way, they attract

each other. If you hold them the other way, they repel each other.

The Maglev train uses magnets in the same way. The motor is a very big electromagnet. (An electromagnet is a magnet that only works when there is electricity.) The electricity changes direction all the time and the magnet changes from north to south, south to north. There are more electromagnets on the rail and this pushes the train forward.

Why don't we see the Maglev train now?

The train is fast, quiet and clean. Why don't we see it everywhere now? Part of the answer is that the train can only take people. It cannot carry very heavy things. Also, because it goes so fast, the rail must be very straight. This makes it difficult to use it in places where there are a lot of hills. But the real answer is because it is very expensive to build. A long rail of electromagnets costs a lot of money. It also uses a lot of electricity. We need to find a cheaper, cleaner way to make electricity if we want to see 'The Flying Train' in our towns and cities.

Is the information in these sentences true [T], false [F] or not in the text[?]?

The Maglev train cannot take heavy things. ☐
The Maglev train can only go on straight rails. ☐
The train makes a lot of noise. ☐
The biggest problem for the Maglev train is that it is too expensive. ☐
It is possible to use the Maglev train everywhere. ☐
The train cannot work when it is raining. ☐

Listen to the text on the cassette.

Three pieces of information are missing. What are they?

a. ....
b. ....
c. ....

Unit 6 Save the Earth!

Topic and language

1 *Discussion* Helping the environment

Look at the pictures. Do you know how the green forests save the Earth? Do you know how the Pothong riverside changed into a beautiful pleasure ground?

Can you think of other ways to help the environment?

2 *Brainstorming and reading* Think of the future

2.1 The way we live

The students in the picture think that we need to change the way we live. Why?

What problems do we make for the environment now? Work in a small group and brainstorm your ideas. Compare your ideas with the rest of the class.

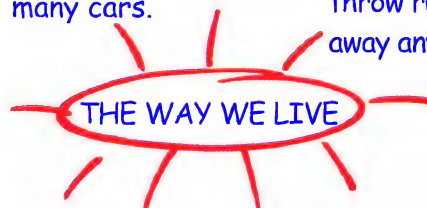
2.2 Some important words

Do you know what these words mean?

natural resources rubbish

recycle biodegradable

packaging renewable

Find the words in the text. What does the text say about them? Tell the class.

2.3 Reasons to help the environment

Work in a group of three. Read paragraph one of the text and then each choose a different section to read ('Recycle it!', 'Reduce it!' or 'Save it!'). Tell each other what your part says. Can you add some more points to your ideas from Ex. 2.1? What reasons does the text give for changing the way people live? Compare ideas with the rest of the class.

You can listen to the text on the cassette.

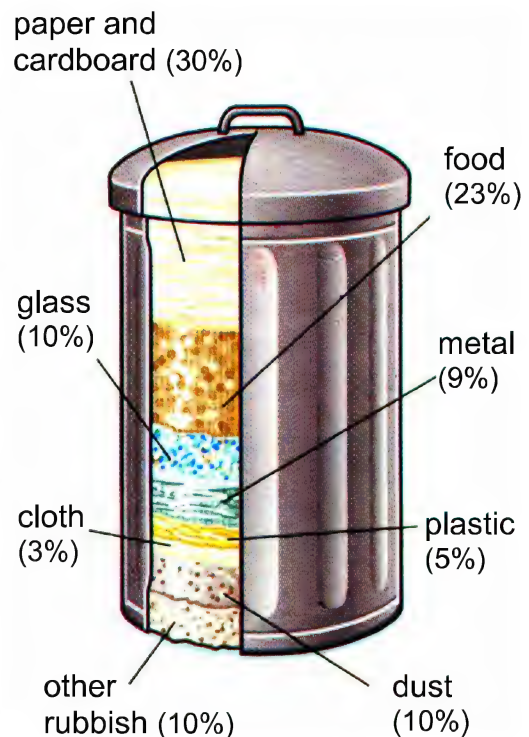
Think of the future!

The population of the world is growing very fast. In the last 40 years, it has doubled. By the year 2200, it will be about 10 000 million. Our cities will be much bigger. There will be more factories and more roads. We will need more water and more natural resources. Experts say that we will have serious problems in the future. They say that we must change the way we use energy and natural resources now.

Recycle it!

Every day people throw away millions of tonnes of rubbish. Half of this is paper that they can use again. A typical family in some countries throws away more than 1 tonne of rubbish each year, but they can recycle most of this. If they recycle things, they can save money, energy and natural resources. Recycling the Sunday newspaper, for example, will save 75 000 trees every week.

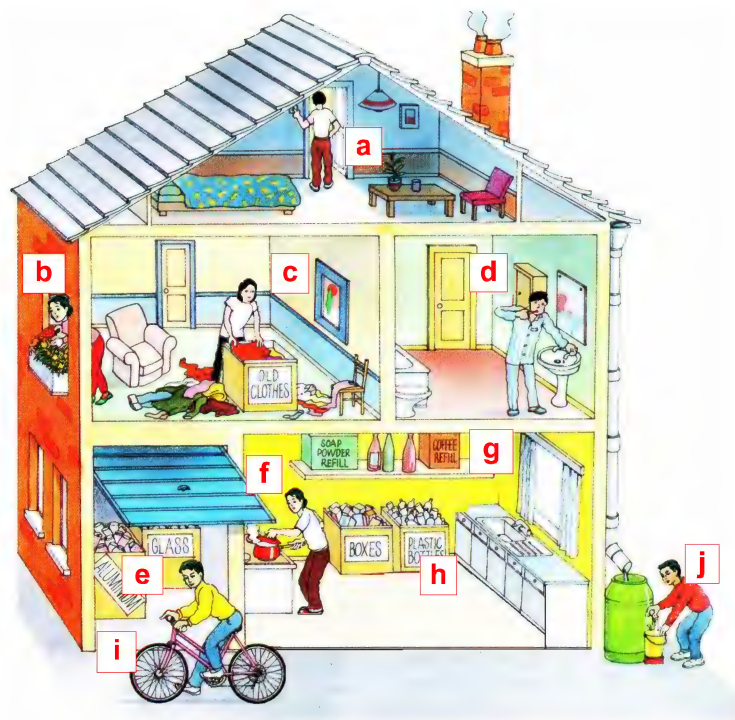
Reduce it!

A lot of the rubbish that people throw away is not biodegradable. Plastic, metals and chemicals will not disappear for hundreds of years. People also produce a lot of unnecessary things, such as packaging. All of this pollutes the air, the land and the water. Pollution will be a very big problem in the future. They must avoid using non-biodegradable material. They must also reduce the amount of unnecessary things that they produce and use. In shops, for example, they can say 'No, thanks!' to the packaging that comes with the things they buy.

Save it!

Many natural resources are not renewable. Coal, gas, oil, metals and minerals, for example, will finish one day. Other resources take a long time to grow, such as trees, or they are not always available, such as water. They have to reduce the amount of resources and energy that they use. They also have to find alternative ways to make energy. They can use the sun, the wind, the sea and the heat of the Earth.

3 *Reading and writing* Recycle it, save it, reduce it ... but how?

Look at the picture of the house. Can you match these sentences to the correct part of the picture?

1) Cover all saucepans when you are cooking.
2) Reduce packaging. Don't buy disposable bottles or boxes.
3) Save electricity. Turn off the lights when you are not using them.
4) Recycle boxes and plastic bottles.
5) Grow your own fruit and vegetables.
6) Recycle old clothes.

There are four more ideas in the picture. Write one or two sentences about each one.

4 *Language focus* Future simple

4.1 Life in the future

In Grade 3, you saw 'going to' to talk about future plans.

I'm going to the cinema tomorrow.

Often, when we talk about future predictions we use 'will'.

By the year 2200, the population of the world ***will*** be about 10 000 million.
There ***will*** be more factories and more roads.

You can use 'will' for everybody. The negative is 'won't' ('will not').

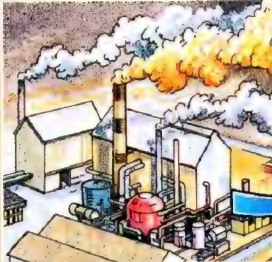
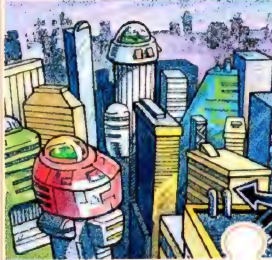
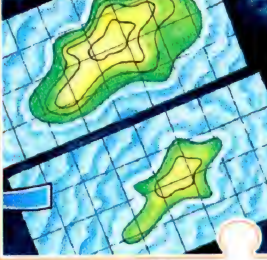
I You He, She, It We You They	will need more water. will use more natural resources. will live in bigger cities. won't live in small villages. won't eat fresh fruit.

4.2 What do you think?

Experts say our cities will be much bigger in the future. They say there will be more factories and more roads.

But how will we live? Tell the class your ideas.

4.3 100 years from now

Our lives will be very different after 100 years from now.
Read these ideas. Do you agree?

(1) Everybody will live in very tall buildings.
(2) We will travel in different ways.
(3) Our cities will be much bigger.
(4) We will eat very different food.
(5) Plants and crops will be very different.
(6) People will look very different.
(7) The Earth will look very different.

5 *Language focus* First conditional

Many of the ideas in Ex. 4.3 will happen if we don't change our lives now. Can you complete the sequence in the jigsaw puzzle?

If the climate changes, the winds and rain will also change. Can you write about what will happen?

If the climate changes, the winds and rain will change.
If the winds and rain change, plants and crops …
If plants and crops …

6 *Writing* Think!

Work in pairs. Choose one of these questions and write about what you think will happen. Look at Ex. 5 for ideas.

What will happen if the air is not good outside?
What will happen if we don't have enough water in the future?
What will happen if there are too many cars?
What will happen if we don't have any coal, gas or oil?
What will happen if everybody works at home?
What will happen if cities grow to 100 million people?

Compare your ideas with other students.

Supplementary Exercises

1 *Vocabulary* What's the word?

Read the clues. Can you find the words in the dustbin?

(1) Things that we do not want anymore: ***r***........
(2) If we turn off lights when we are not using them, we can ***s***....... energy.
(3) We have to find ways to ***r***........ the things that we use. For example, we can use paper again.
(4) Plastic is not ***b***....... . This means it will not disappear for hundreds of years.
(5) Many of the things that we buy come with too much ***p***........ .
(6) Motor cars ***p***....... the atmosphere.
(7) Coal, gas, oil and minerals are natural ***r***....... .
(8) We have to find ***a***...... ways to make electricity.
(9) People in some countries use more ***e***....... every day than people in other countries.

Find some more words in this Unit and make a word square for other students. Write some clues in English and some clues in Korean.

2 *First conditional* Changes in the future

In this Unit you saw what will happen to our cities if the temperature rises. If the temperature rises, the climate will also change. Can you put these sentences in the correct order?

[ ] **a.** If agriculture changes, we will have to eat different things.
[ ] **b.** If we have to eat different things, our lives will change a lot.
[2] **c.** If the temperature rises, the climate will change.
[ ] **d.** If plants and crops don't grow in the same way, agriculture will change.
[1] **e.** If carbon dioxide in the air increases, the temperature will rise a lot.

☐ **f.** If the winds and rain change, plants and crops will not grow in the same way.

☐ **g.** If the climate changes, the winds and rain will change.

3 *Future simple* What do they think?

Some students asked people what they think about life after 100 years from now. Listen. What does each person say? Copy and complete the table.

	Person 1	Person 2	Person 3
How will we live? Will life be better or worse?			

4 *Writing and speaking* Talk to Maggi

Write your answers to Maggi's questions. Then talk to her on the cassette.

MAGGI: Hi. Do you live in a big town?
YOU: ....
MAGGI: Well, I live in a big town. There is quite a lot of pollution here. Is there a lot of pollution where you live?
YOU: ....
MAGGI: One good thing in my town is that we have some big parks. What about where you live?
YOU: ....
MAGGI: That's interesting. At my school, we are collecting old aluminium cans to recycle them. Are you doing anything in your school like that?
YOU: ....
MAGGI: In my town, there are lots of 'bottle banks' where you can take old bottles. Do you have them near where you live?
YOU: ....
MAGGI: What other things do people do to help the environment where you live?
YOU: ....
MAGGI: In our country, there are special laws to control pollution. What special laws are there in your country?
YOU: ....
MAGGI: That's interesting. Can you tell me some more about that?
YOU: ....
MAGGI: Well, I must go now. Talk to you later! Bye.
YOU: ....

Unit 7 No pollution in our country

Culture matters

1 *Discussion* **Problems from cars**

Look at the picture. Pyongyang looks very fresh and clean. It is called the city in a large park. Do you know why there is no pollution in our country?

Cars do a lot of damage to the environment.
What problems are there from cars, do you think? Why do people use buses or trains so much in our country? Why don't they use their cars more?
How does the government control the use of cars in our country?

2 *Reading and discussion* **Pollution in capitalist countries**

2.1 Traffic in Britain

Work with your neighbour.
Read 'Dangerous driving in Britain'.
Make more than 5 questions on the texts.
Compare your questions with other students.
You can listen to the texts on the cassette.

Dangerous driving in Britain

In common with many capitalist countries, Britain has *serious environmental* problems. In 1952, more than 4 000 people died in

London because of the smog. The government introduced new laws to stop smog from coal fires and factories and the situation improved a lot.

Today, London is much cleaner but there is a new problem: smog from cars. In December 1991, there was very little wind in London and pollution increased a lot. As a result, about 160 people died from pollution in just four days.

Part of the problem is the new 'out of town' shopping centres. In the past, people often walked to shops near their home or went by bus. Now, many people drive to the new shopping centres. As a result, the small shops have disappeared and more people have to travel to do their shopping.

Critics say that Britain needs better and cheaper public transport. Transport in Britain is very expensive. An early morning train trip from Glasgow to London (about 600km) can cost about £100 for example. A short 15-minute bus trip can cost over £1.

2.2 What do you think?

Do cities in our country have the same problems as London?

3 *Writing* Decide... Across cultures

Work in a small group and choose an exercise.

3.1 *Writing* Make a questionnaire

What transport do you usually use?
How do people use transport in your area?
Work in a small group and brainstorm your ideas for a questionnaire. Ask people your questions and write about what you discover.

3.2 *Discussion* Cars: for or against?

Work in a group of four. Imagine ...

The government has plans to stop ALL cars from driving near your school. Is that a good idea?

What problems are there?

Two of you are FOR the idea and two of you are AGAINST it. Make a list of your points and then discuss with the other two students.

Make a poster of the points from each side and tell the class.

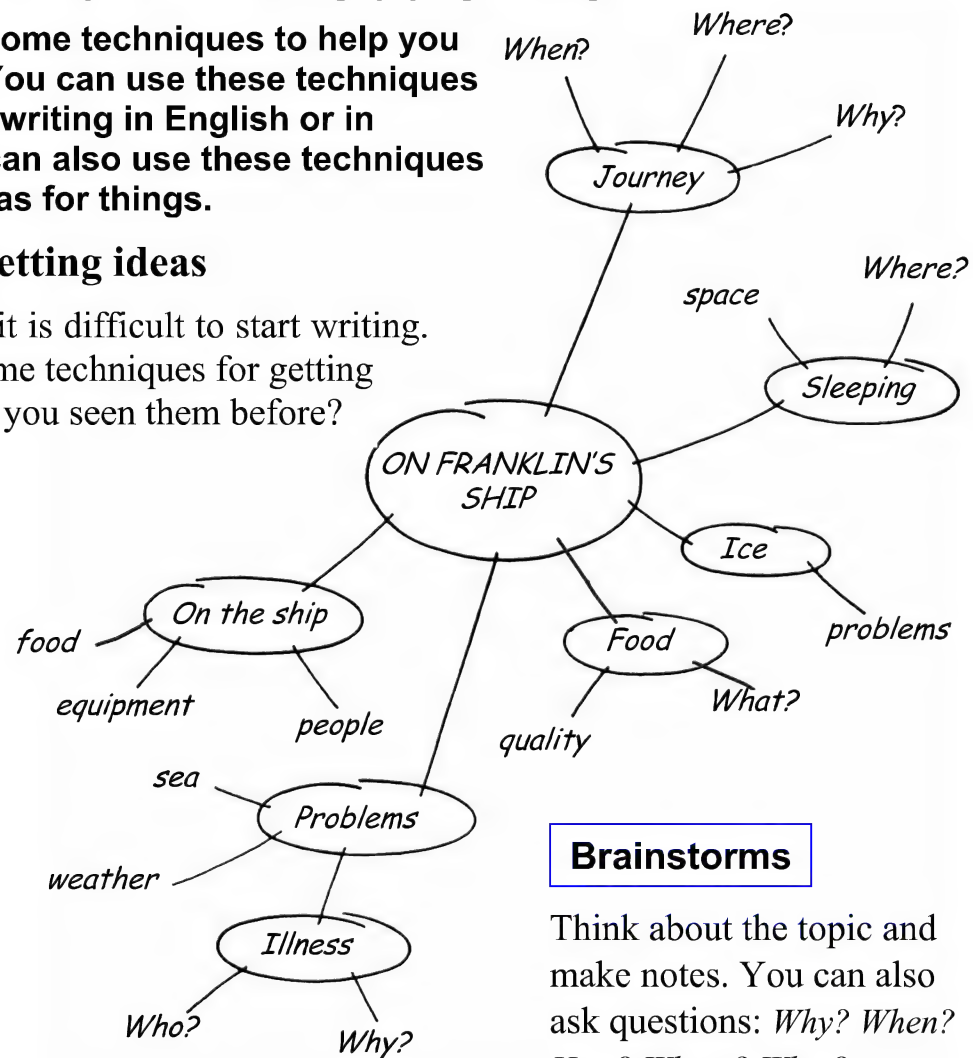
What do other students in your class think?

Supplementary Exercises

Ways to writing (1): getting ideas

You can see some techniques to help you with writing. You can use these techniques when you are writing in English or in Korean. You can also use these techniques just to get ideas for things.

1 Ways of getting ideas

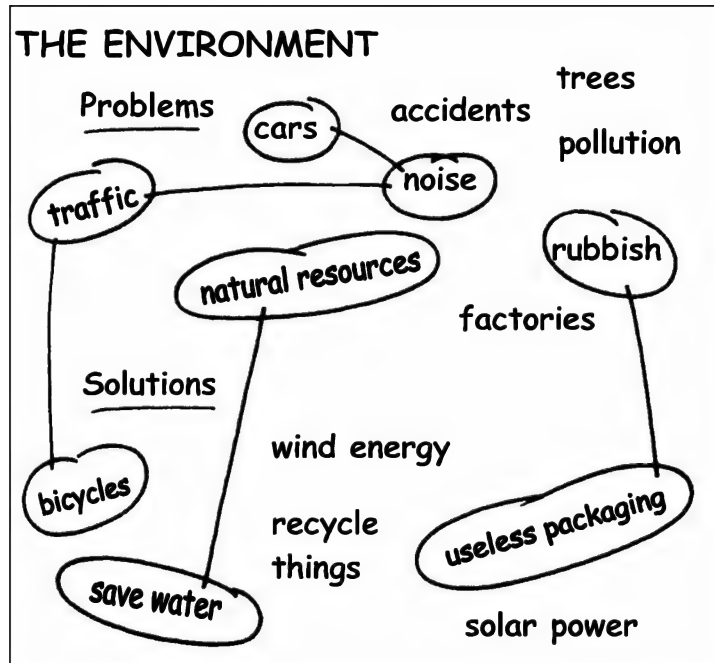
Sometimes it is difficult to start writing. Here are some techniques for getting ideas. Have you seen them before?

Brainstorms

Think about the topic and make notes. You can also ask questions: *Why? When? How? Where? What?*

Free writing

With this technique you just write. Don't stop. Write what is in your head. Don't think about spellings or grammar. Just write. If you don't know a word, write it in Korean. Write what comes into your head about the topic ... keep the ideas coming!

Free notes

Think about the topic and write notes on a piece of paper. Write them anywhere on the paper. When you have finished, you can organize your notes.

2 Your ideas

Look at this list of topics. Choose three topics (or invent your own) and make notes about each one. Use a different technique for each topic.

Next lesson, compare notes with other students.

3 Write!

Choose one of your topics and write one or two paragraphs about it. Use your notes to help you. Keep your work for Supplementary Exercises in Unit 11.

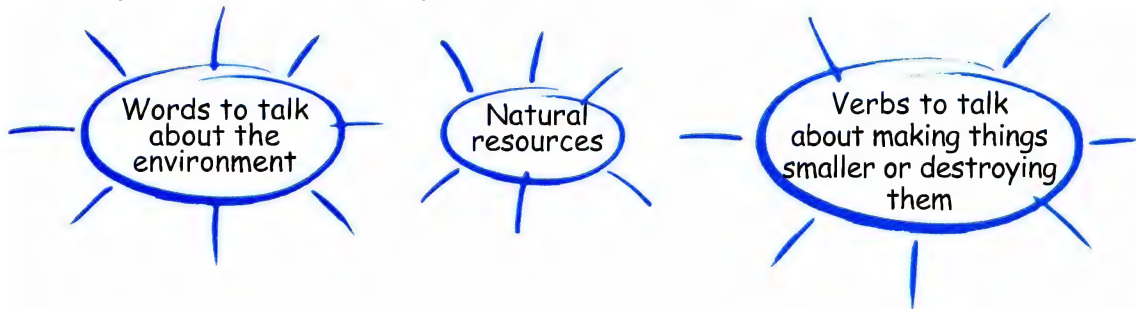
Revision and test
(Units 5–7)

Revision

1 *Vocabulary* The words you met

1.1 Word groups

Here are some of the words you saw in Units 5—7. Can you put them into three word groups?

aerosol spray air cancer burn cars carbon dioxide coal damage hole disappear factory gas destroy minerals oil packaging land biodegradable non-biodegradable metal save pollution recycle reduce rubbish ultraviolet greenhouse effect resources water ozone layer radiation temperature wind pollute renewable

Compare circles with other students in your class. Can you make any more word groups from Units 5—7?

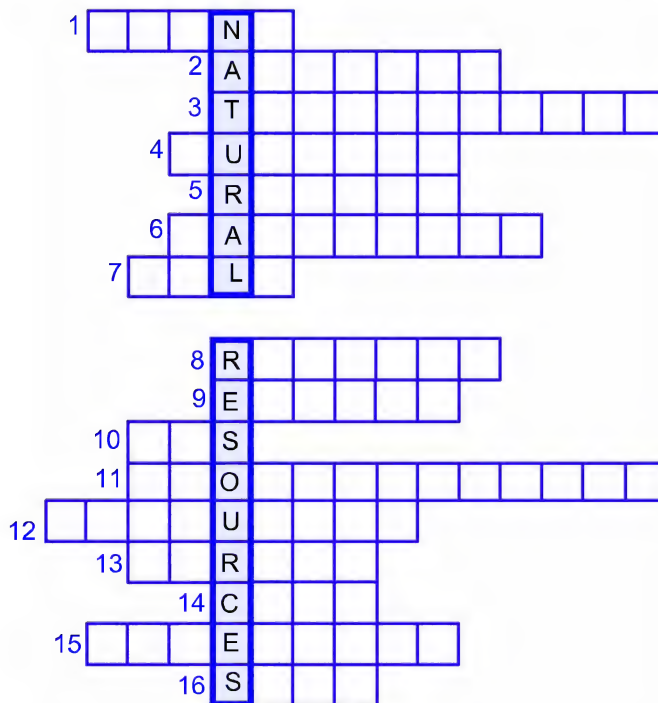
1.2 A puzzle

Now use the words from your circles to complete the puzzle.

(1) A special type of oxygen around the Earth

(2) ***A***........ sprays pollute the air.

(3) In the last 100 years, the ***t***........ of the Earth has risen almost 1°C.

(4) Every day, people produce millions of tonnes of ***r***........ .

(5) We must try to ***r***........ the amount of energy that we use.
(6) The paper and plastic that comes with the things that we buy
(7) Scientists have discovered a ***h***........ in the ozone layer.
(8) We can ***r***......... many of the things we use. For example, we can use paper again.
(9) The temperature of the Earth is rising because of the 'greenhouse ***e***.......'.
(10) Oxygen is a ***g***......... .
(11) Plastic is not ***b***........ . It will not disappear for hundreds of years.
(12) In most big cities, there is a lot of ***p***........ .
(13) If you burn coal and oil, you get ***c***........ dioxide.
(14) A black mineral that we can burn
(15) Many of our natural resources are not ***r***........ .
(16) We have to ***s***........ energy.

2 *Present perfect* School news

2.1 The week at school

Read the text 'School News' and choose the correct phrase for each gap.

have collected
have cleaned
have found
have done
have designed
have found
have lost
have organized
have put
have taken

School News

This week we ___***a***___ a lot of things at school.
Students in Class 1 ___***b***___ over 3 000 aluminium cans. We ___***c***___ these to the town recycling centre.
Students in Class 2 ___***d***___ the play-ground. They ___***e***___ a lot of things – so if you ___***f***___ something, ask Class 2!
Students in Class 3 ___***g***___ large rubbish bins in the playground. Please put your rub-bish there, in future!
Class 4 ___***h***___ 'Save it!' posters for each classroom.
Class 5 ___***i***___ a lot of old books, clothes and toys.
We ___***j***___ another meeting on 20th March. Please come with more ideas.

2.2 What has happened?

What has happened in your school this week? Write five sentences. For example:

This week, we have had a test.

2.3 When do you use the Present perfect?

Exercises 2.1 and 2.2 have many examples of the Present perfect. When can you use the Present perfect? Choose an answer.

You can use the Present perfect:

a. when you want to talk about things that happened last week, yesterday, last year.

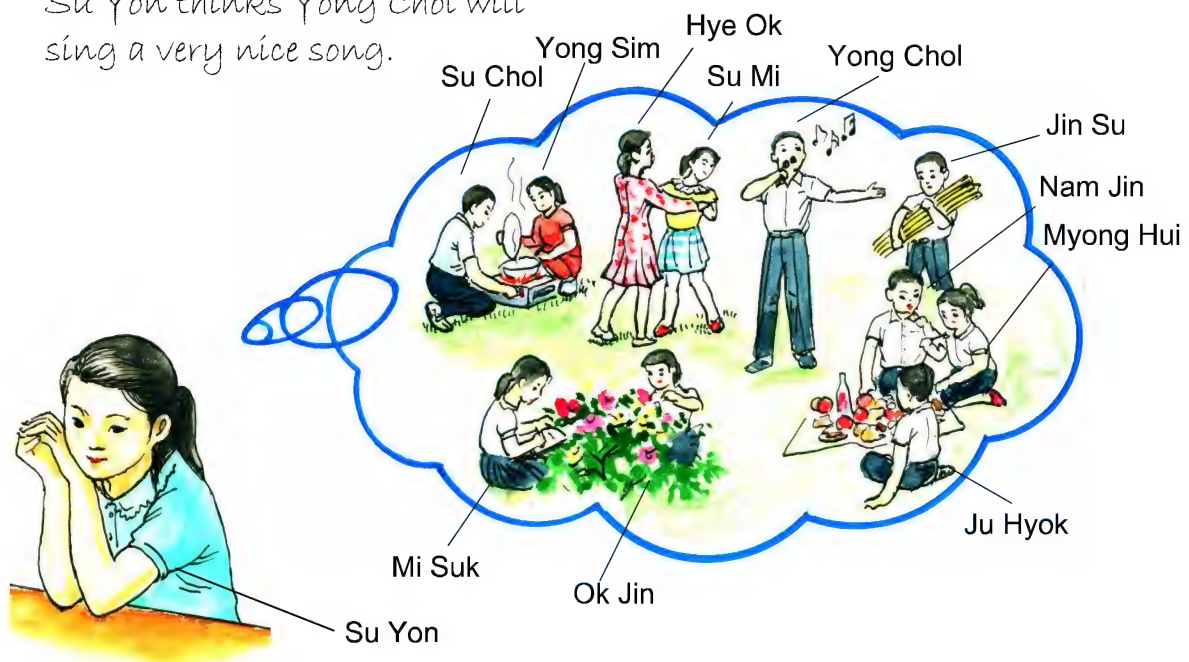
b. when you want to talk about things that happened this week, today, this year and that have a result now.

c. when you want to talk about the future.

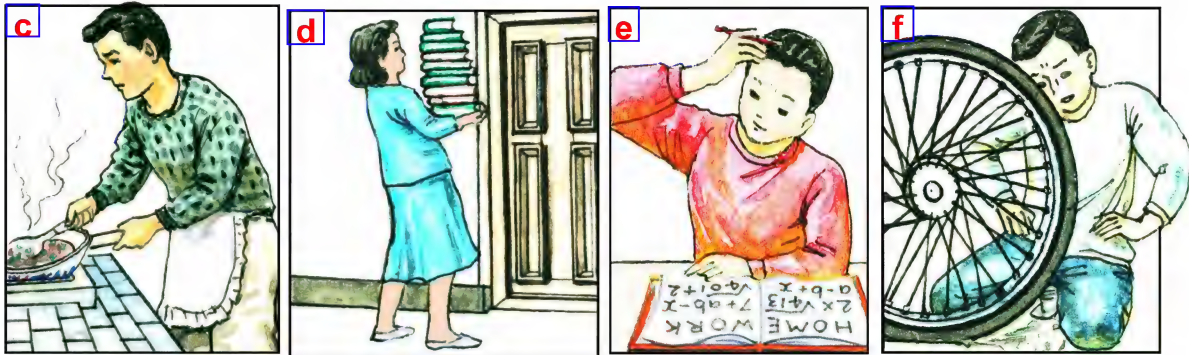
Find some examples in Exercises 2.1 and 2.2 to prove your answer.

3 *Future simple* The picnic

Next week, Class 3 is going on a picnic. This is what Su Yon thinks will happen. Write a sentence about each student.
For example:

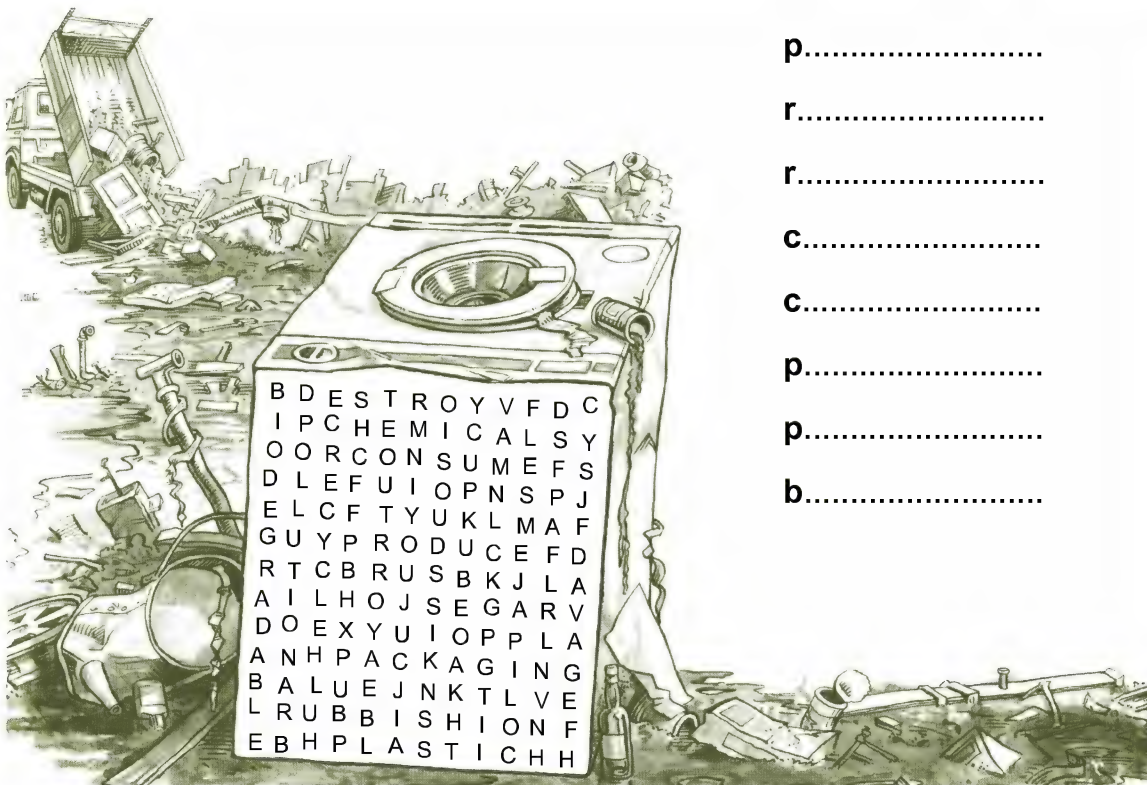
Su Yon thinks Yong Chol will sing a very nice song.

4 *Offers with 'will'* I'll help!

You want to help these people.
What can you say?
For example:

I'll carry your bag!

Test yourself

1 *Vocabulary* **Into the ground!**

Look at the puzzle. Can you find 10 words from Units 5—7? They begin with these letters:

B D E S T R O Y V F D C
I P C H E M I C A L S Y
O O R C O N S U M E F S
D L E F U I O P N S P J
E L C F T Y U K L M A F
G U Y P R O D U C E F D
R T C B R U S B K J L A
A I L H O J S E G A R V
D O E X Y U I O P P L A
A N H P A C K A G I N G
B A L U E J N K T L V E
L R U B B I S H I O N F
E B H P L A S T I C H H

d........................
p........................
p........................
r........................
r........................
c........................
c........................
p........................
p........................
b........................

Now complete the text with words from the puzzle.

LANDFILLS

People in a country (1)produce about 2kg each of (2)........... every day. Most of this goes into big holes in the ground called 'landfills'.
Landfills don't solve the problem of rubbish – they hide it. Things like paper and food, for example, are (3)............. but the process is very slow. Things like metal and (4)........... never disappear. Landfills also cause water (5).............. because dangerous (6)........... often come out into the rivers.
We have to stop producing so much rubbish! At the moment, everything we buy has too much (7)............. We (8)................. only about 13% of our paper and cans but we could increase this to 45%.

There are two extra words in the puzzle. Use the words to write two sentences about alternatives for the future.

....

....

2 *Present perfect* A landfill archaeologist

Charles Watson has an unusual job. He is a landfill archaeologist. Steven Black is talking to him about his work. Read Charles' answers and write Steven's questions.

STEVEN: How long [1] .... a landfill archaeologist?
CHARLES: About 20 years, I think.
STEVEN: What do you do, exactly?
CHARLES: I investigate landfills. I also see how landfills have changed. It's a very important job!
STEVEN: How [2]..?
CHARLES: Well, they have changed in many ways. They are a lot bigger nowadays.
STEVEN: Why?
CHARLES: Well, in the past, people sold things or tried to repair them. Now they just throw them away. People also throw away a lot more food.
STEVEN: Have [3]............................ any old food?

CHARLES: Oh yes, we often discover old food. Nearly every day we discover food that is 15 or 20 years old – meat, vegetables, bread. Food has a lot of chemicals in it now to preserve it, so it isn't so biodegradable.

STEVEN: [4] ....?

CHARLES: Oh! I've found lots of valuable things. Watches, rings, cameras – all sorts of things!

STEVEN: [5] ....?

CHARLES: Well, I haven't found much money!

STEVEN: Thanks, Charles.

CHARLES: Nice talking to you, Steven.

Listen and check your answers.

3 *Future simple; first conditional* **What will happen?**

Finish the sentences with your own words.

(1) If we recycle all our paper, ...

(2) If we reduce the amount of packaging, ...

(3) If we don't use plastic bags, ...

(4) If we manufacture electric cars, we will ....

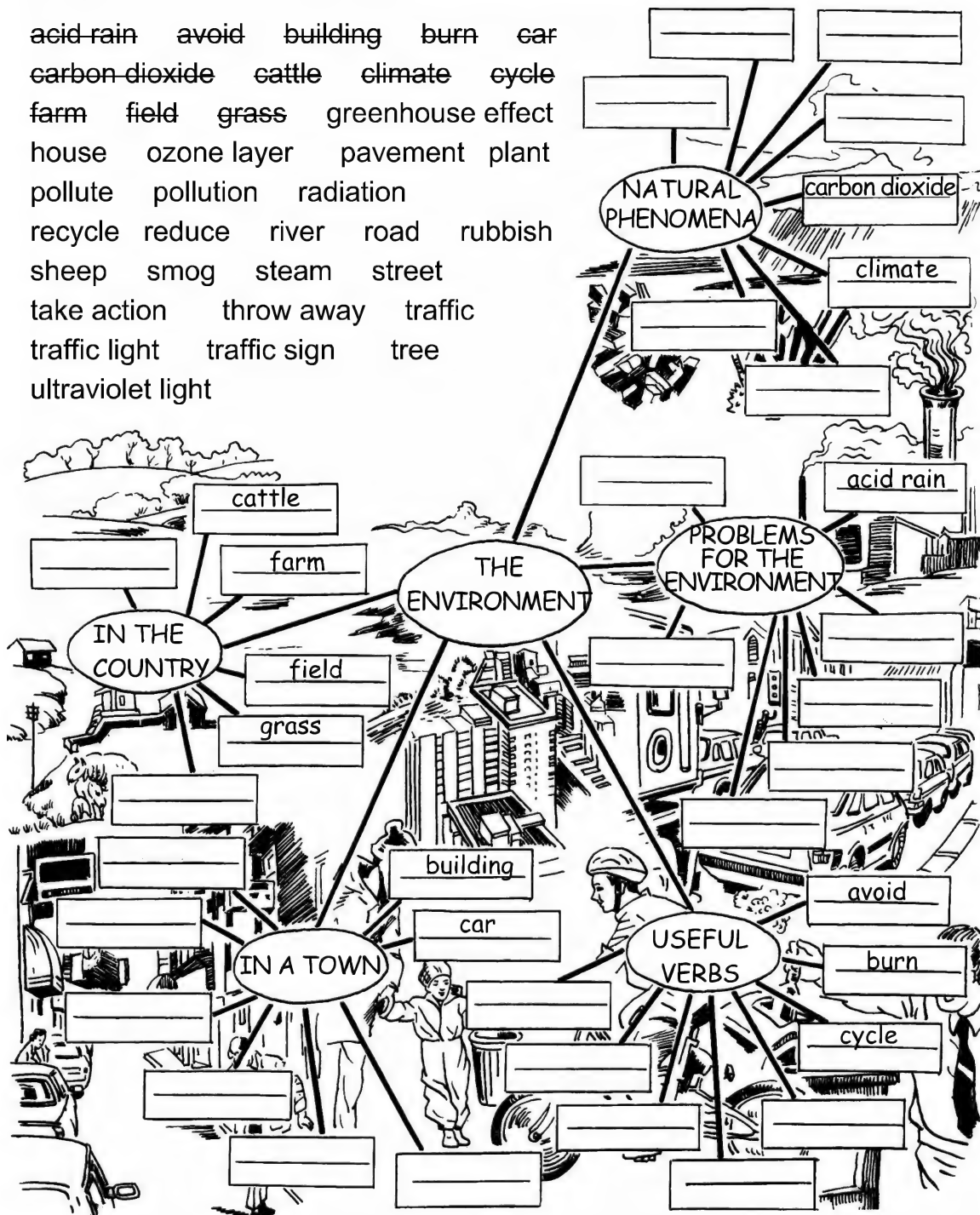
4 *Offers with 'will'* **I'll help!**

You want to help these people. What can you say?

A vocabulary map (2)

THE ENVIRONMENT

Write these words in the correct area of the vocabulary map. (Some words can go in two or more areas.) You can also add the meanings in Korean (in the bottom half of each box). Can you add any more words that you know or any more areas to the map?

~~acid rain~~ ~~avoid~~ ~~building~~ ~~burn~~ ~~car~~
~~carbon dioxide~~ ~~cattle~~ ~~climate~~ ~~cycle~~
~~farm~~ ~~field~~ ~~grass~~ greenhouse effect
house ozone layer pavement plant
pollute pollution radiation
recycle reduce river road rubbish
sheep smog steam street
take action throw away traffic
traffic light traffic sign tree
ultraviolet light

Theme C The world of music and film

Unit 9 Music

Topic and language

Orchestral concert

1 *Discussion and listening* Music all around us

1.1 Music and you

Look at the picture. Have you ever enjoyed an orchestral music 'A Bumper Harvest in the Chongsan Plain' at the Moranbong Theatre newly rebuilt under the warm care of the great leader Marshal **Kim Jong Il**?

Read these questions. Tell the class what you think.

What type of music do you like?
What type of music don't you like?
Do you ever buy cassettes or CDs?
How has your taste in music changed?

1.2 Musical instruments

Do you play a musical instrument?
What instrument would you like to play?

Can you match the correct name to the pictures?

harp oungum violin accordion guitar flute piano kayagum trumpet

2 *Reading and discussion* A (very short) history of revolutionary paean in our country

2.1 Musical pictures

Look at the pictures in the text.
Do you know who composed the revolutionary paean 'Star of Korea'?
What art troupe is famous for performing revolutionary paean? Do you like their music?

A (very short) history of revolutionary paean

'Star of Korea'

Revolutionary paean originated in 'Star of Korea' composed by the revolutionary poet, Kim Hyok. By the end of the 1920s, it had become very popular. It reflected the ardent desire of the people for the great leader Generalissimo **Kim Il Sung** to be the lodestar of the Korean revolution, the morning star which disperses the darkness from the night sky and calls forth the dawn.

The immortal revolutionary paean 'Song of General **Kim Il Sung**'

After liberation all the Korean people were overjoyed with emotion for having the great leader Generalissimo **Kim Il Sung** as the legendary hero and the great sun of the nation. By that time our creative artists had composed this song. Our symphony orchestra raised the curtain of its founding with the performance of chorus and orchestral music 'Song of General **Kim Il Sung**' in August Juche 35(1946). From then, the Korean people, singing the song with vigour, laid a new foundation of democracy, defeated the US imperialists and built a paradise of Juche on their land. We will continue to creditably implement the Juche revolutionary cause singing the song full of yearning and respect for him.

‘Cantata to Marshal **Kim Il Sung**’

Noticing the success of the revolutionary paean music, the Korean People’s Army Song and Dance Ensemble started to copy the same style. By the mid of the 1950s when the factionalists came out with an evil scheme against the Party and revolution, this song had resounded as a song of loyalty to the great leader Generalissimo **Kim Il Sung**.

This song is a plain one easy to sing, so it is still widely sung among the Korean people as a famous song that represents the immortal revolutionary achievements and virtue of the great leader Generalissimo **Kim Il Sung**.

The immortal revolutionary paean ‘Song of General **Kim Jong Il**’

This paean sings of glorious revolutionary history of the great leader Marshal **Kim Jong Il**. And it just reflects our people’s sincere and absolute worship for the respected General and their will to look up to and follow him forever.

The wide-ranging and vigorous tune is representative of the respected General’s pluck and resourcefulness of Mt. Paektu. The joyous tune gives a vivid presentation of the Korean people’s happiness at having acclaimed him as the great Sun of the 21st century. This paean is a revolutionary one for genuine socialism in the era of independence, and a banner of struggle quite encouraging the progressive people of the world.

We will strive to hasten the building of a great, prosperous and powerful nation of Juche and the reunification of the country, singing the song at the top of our voice.

2.2 Types of popular music

Do you know what these musical labels mean? Compare ideas with other students in your class.

revolutionary paean   folk song   lyric song   symphony   light music

Inside the text

A *Vocabulary* **What does it mean?**

Can you match the words in Box 1 with the words in Box 2?

1	2
paean	someone who writes poetry
immortal	a star that is used to guide the course
poet	feeling
popular	a piece of music performed by singers and an orchestra
lodestar	a song that expresses enthusiasm and admiration
disperse	respect
emotion	undying
admire	faithful
cantata	scatter
loyal	many people like it

B *Comprehension* **Check your understanding**

Work in pairs and make notes about the following things. Then tell your partner what the text says.

- by the end of the 1920s
- in Juche 35(1946)
- by the mid of the 1950s

3 *Say it clearly!* /t/, /d/ and /ɪd/

Do you remember how to say '-ed' correctly? Find all the verbs and adjectives in the text that end with '-ed'. Can you put them in the correct column?

3.1 Listen and say the words

There are three ways to say '-ed' at the end of verbs or adjectives from verbs. Listen and say the words.

After verbs that end with /t/ or /d/, you say /ɪd/.

hated   started   ended   mended

After verbs that end with /p/, /k/, /tʃ/, /f/, /θ/, /s/ or /ʃ/, you say /t/.

stopped   liked   washed   introduced

After verbs that end with a vowel or /b/, /l/, /g/, /v/, /z/, /ɜ:/, /m/, /n/, /ŋ/, /ʤ/, you say /d/.

arrived lived listened played

3.2 /t/, /d/ or /ɪd/?

Can you put these verbs into the correct column?

asked changed climbed decided
developed discovered dropped
happened looked stayed studied
visited wanted watched

liked /t/	started /ɪd/	lived /d/

Listen and check your answers with the cassette.

4 *Language focus* **Past perfect**

4.1 What's it for?

In Units 5—8, you saw sentences with the Present perfect:

I have done my homework ... ... so I can watch TV now.
I have studied English for 10 years ... ... so I know a lot of words.

Do you remember what we use the Present perfect for? (Hint: past action, present result).

In Ex. 2 you saw sentences with the Past perfect. For example:

By the end of the 1920s, it ***had become*** very popular.
By that time our creative artists ***had composed*** this song.
..., this song ***had resounded*** as a song of loyalty ...

How do you say these sentences in Korean? What do you think we use the Past perfect for? Tell the class your ideas.

4.2 How to form the Past perfect

Here are some more examples of the Past perfect. How can you describe it?

They found one of Franklin's sailors in 1857, but he ***had died*** ten years earlier.
People say Europeans discovered Australia, but the Aborigines ***had discovered*** it 12 000 years earlier.
The Hindenburg ***had made*** ten trips before it exploded in 1937.

4.3 *Practice* **Mansudae Art Troupe**

Complete the sentences with the Past perfect.

1 perform	3 stage	5 experiment	7 win
2 become	4 introduce	6 record	

A (very short) history of the Mansudae Art Troupe

The Mansudae Art Troupe was renamed in Pyongyang in the late 1960s, but they ____1____ in 1946 in the name of the Pyongyang Song and Dance Troupe.

They started by playing our folk songs, other lyric songs and dances, but they quickly developed their own style under the deep care of the great leader Marshal **Kim Jong Il**. By the 1970s, they _____2_____ Korea's top art troupe. By the beginning of the 1970s and the mid of the 1980s, they toured many countries: China, Japan, Algeria, Russia, Germany, France, Italy, etc., where they attracted millions of fans by playing the revolutionary opera 'The Flower Girl' which anti-Japanese revolutionary fighters ____3____ at Wujiazi in 1930. By the time, the women's musical ensemble group ____4____ new sounds and technical skills and they ____5____ with different types of musical instruments. They ____6____ hundreds of pieces of music such as 'The Snow Is Falling' and ____7____ many awards for their music. Today the Mansudae Art Troupe is still very famous all over the world.

5 *Music knowledge* **A music quiz**

Work in pairs or a small group. Write four or five questions about music – about Korean folk song, orchestral music, musical instruments, singers, groups ... anything.

Put all your questions together and divide the class into teams to have a quiz. See which team can answer the most questions correctly!

6 *Fluency* All about ... the music today

6.1 Search!

Look at the texts. Can you find answers to these questions?

- ***a.*** Which texts are about technology? Which texts are about business?
- ***b.*** When did compact discs first appear?
- ***c.*** What is another word for 'group'?
- ***d.*** How long does it take to record a new CD or cassette?

Write some more 'search' questions for other students.

6.2 Read and think

Read *In the studio*. Sometimes a music group makes a 'remix' of their songs. What do you think that is?

Read *Music is big business in some countries.* Find eight examples of the word 'they'. Who is 'they' in each sentence?

Read *New technology.* What will happen to jobs in recording studios and the work of a singer?

Read *What next?* Can you think of a similar problem with other new technology? (Hint: cameras, TVs, radios, motor cars ...)

In the studio

In the 1960s, it took music groups one or two days to record their songs. Nowadays, it can take months and months. They begin by recording only one instrument, for example, the voice. Then, they record other instruments – electric piano, synthesizer, guitars, drums and so on.

Next, they might use a computer to add special effects. Finally, they 'mix' all the instruments until they get the sound that they want. This means that a CD or cassette will always sound very different from a live concert.

Music is big business in some countries

Most of people listen to music for pleasure, but for the record companies, music is a product, the same as soap powder. When a record company finds a new group (or 'band'), they first try to develop the band's 'profile'. They will try to create an 'image' for the band, that they think will attract young people. They will often tell the band what they should wear, what they should say and how they should sing and play.

In recent years, many music groups have started their own record companies because they say that the big companies are too commercial. This shows what music is for in some countries.

New technology

Music engineers have developed a new computer programme that will change the future of music. A computer can analyse a singer's voice. Then, if you give the computer the lyrics and music of a song, the computer can 'sing' it in that voice. This means that a singer only needs to record one song and the computer can then sing other songs in the singer's own voice. Singers can sing new songs many years after they have died.

What next?

Technology is changing very fast. A new way of playing recorded music appears every few years. For most of us, this is a big problem. Very soon, it will be impossible to play the discs and cassettes that we have at home. For the record industry, this is a big advantage.

When compact discs appeared in 1983, for example, many record companies produced all their old recordings again.

New technology is new business in capitalist countries. A recording company makes compact discs and compact disc players, so it is in their interest to develop new technology.

7 *Decide...*

Choose an exercise.

7.1 *Writing and speaking* **Work in pairs. Imagine ...**

You are on a radio programme. One of you is an interviewer, the other is an 'expert'. Use the information in the texts or any information you have.

INTERVIEWER: Prepare some questions about music today. You can ask about the new computer program, the history of disc players ... and more.

EXPERT: Read through the information and make some notes.

When you are ready, practise your interview together. Then, act it out for the class.

7.2 *Writing* **You decide!**

Decide what you want to do and ask your teacher. You could:

— write about your favourite singer.
— write about a musical instrument that you play.
— think of a song and write some new words.
— write some questions.
— write an interview with a musician.
— write a puzzle.

Supplementary Exercises

1 *Vocabulary* **Some musical instruments**

We often think about musical instruments in different categories. Look at the pictures. Can you write the names of the instruments under the correct heading?

Instruments that have strings (Stringed instruments)	Instruments that we blow (Wind instruments)
Instruments that we hit (Percussion instruments)	Instruments that have 'keys' (Keyboard instruments)

Now look at the instruments in Ex. 1. Put them under the correct heading.

2 *Past perfect* A busy evening

Last night some friends came to Su Il's house. Look carefully at the picture. Can you find six things that he had done before they arrived? Write a sentence about each one.

For example:

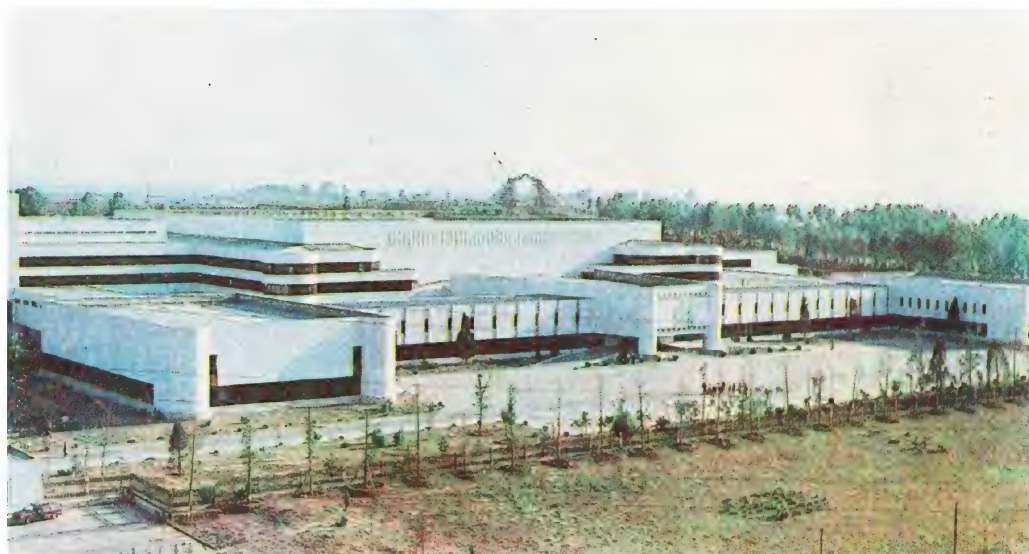
He had cut his hair.

3 *Writing and speaking* Talk to Lewis

Write your answers to Lewis' questions. Then talk to him on the cassette.

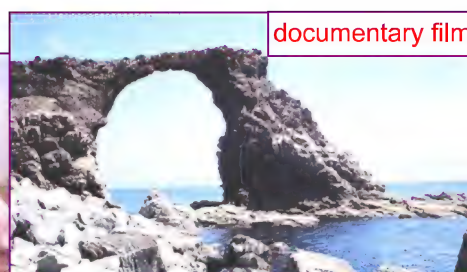
LEWIS: Hi! How are you today?
YOU: ....
LEWIS: Do you want to hear my new cassette? Listen. Do you like it?
YOU: ....
LEWIS: Well, I think it's awful! It was a free gift with a magazine. What type of music do you like?
YOU: ....
LEWIS: Can you give me some examples?
YOU: ....
LEWIS: That's interesting. I like playing the guitar. Do you play a musical instrument?
YOU: ....
LEWIS: What is your favourite instrument?
YOU: ....
LEWIS: Why?
YOU: ....
LEWIS: Sometimes, I listen to music when I'm doing my homework. When do you listen to music?
YOU: ....
LEWIS: Well, I must go now. It was nice to talk to you. Bye!
YOU: ....

Unit 10 The big screen

Topic and language

Korean People's Army April 25 Film Studio

1 *Discussion and listening* On the big screen

1. The films you like

Look at the pictures. What type of films do you like most?
What films have you seen recently?
What were they about? Did you like them?
Why/Why not? Tell the class your ideas.

2 *Writing* A film review

2.1 A film you have seen

Think about a film you have seen. What was it about? What happened? Who was in it? What did you think about it? Work by yourself and make some notes. For example:

A Squirrel and a Hedgehog
- cartoon
- their activities in the enemy rear

Use your notes to tell your neighbour about the film.

2.2 A review poster

Use your notes to write a short description of the film. For example:

A Squirrel and a Hedgehog
'A Squirrel and a Hedgehog' is a cartoon. In it there appear Kumsaek and Juldarami (scouts), Hedgehog and Duck (commanding officers). They fight bravely to defend the 'Flowery Hill'. But ...

Give the film one to four stars.

Put all your reviews together and make a poster for your class.

* A little bit better.
** Good, interesting.
*** Very good. See it if you can.
**** Excellent! You must see this film.

3 *Reading* How do they make a film?

3.1 The people who make it

Usually, at the end of a film there is a long list of people who made it. Look at this list. Do you know what each person does?

the writer   the director   the director of photography   the designer

Tell the class your ideas.

3.2 The film-makers

Read the text about the steps in making a film. Who is the most important person, do you think? Why? Who has the most interesting job? What job would you like to do? Why?

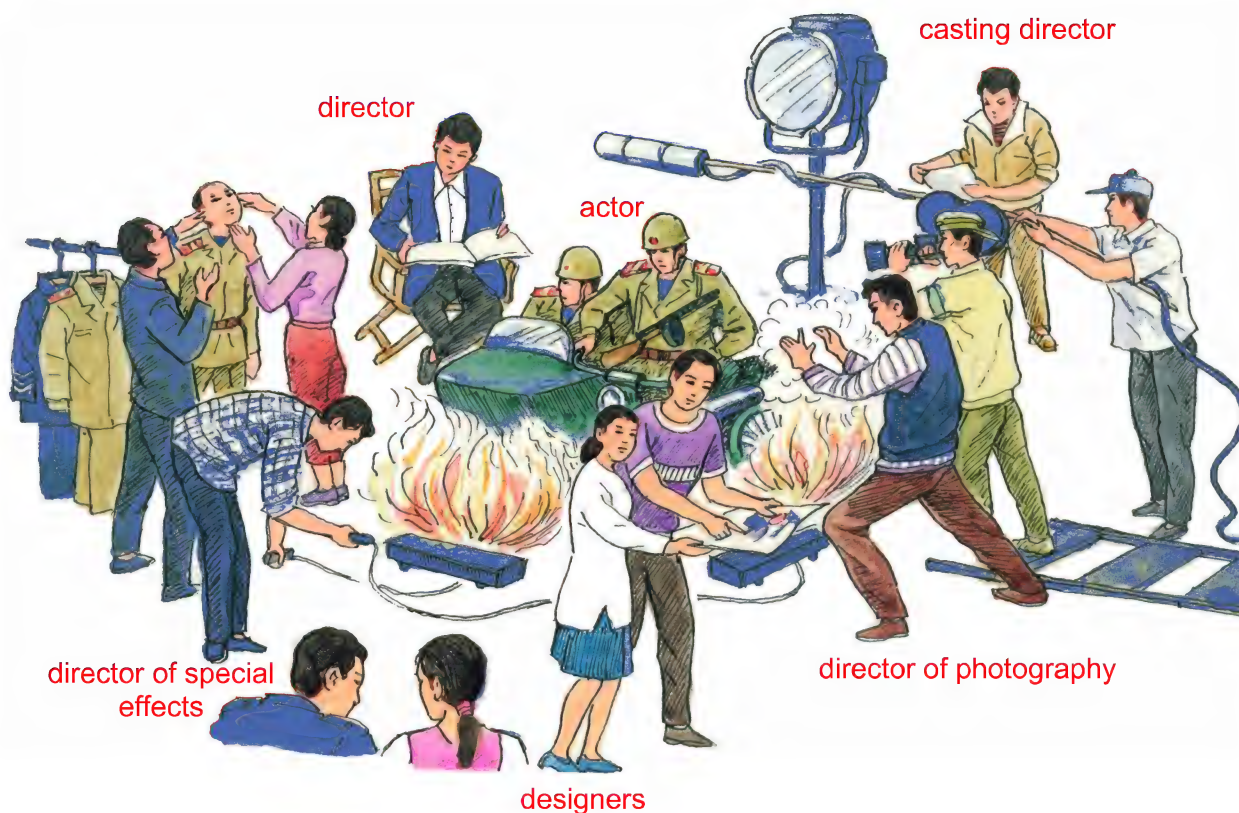
You can listen to the text on the cassette.

STEP 1: THE IDEA

A film starts with an idea. Often, this comes from a producer. The producer contacts a writer.

The writer writes a script. If the producer likes it, the producer then contacts a director.

The director plans how they can make the film. If the producer agrees, the director then chooses the people who will help to make the film.

STEP 2: MAKING THE FILM

The director decides exactly what will happen in each scene.
The director of special effects organizes the special effects for the film.
The designers are responsible for choosing the clothes and the make-up for the actors, and for deciding what the 'set' will look like.
The director of photography is in charge of directing all the camera operators.
The casting director has the job of choosing the actors.
The actor. Often, there are one or two main actors or actresses ('stars'), some supporting actors and 'extras' who appear in the crowd scenes.

STEP 3: EDITING THE FILM

Every day, the editors produce film for the director to check. They cut the film and join it together the way the director wants it.

STEP 4: SENDING THE FILM

When the film is ready, it is sent to video shops, television broadcasting station and cinemas and people watch it!

4 *Language focus* Gerunds

4.1 Verbs after prepositions

Words like *of, in, at, about, for, with, by, up, down* and *from* are called prepositions. Look at these sentences. How do you say them in Korean? What do you notice about the form of the verb after a preposition?

I'm not interested ***in seeing*** that film.
They use a computer ***for editing*** the film.
She's very good ***at acting***.

Look back at the text in Ex. 3.2 and find more examples of a verb after a preposition.

4.2 Practice

Read the story about Henry Brown.
Underline the prepositions and then write the correct form of the verb.

A great film-maker?

Henry Brown was interested in _____***a***____(make) a film. Unfortunately, he wasn't very good at ___***b***___(convince) people to lend money to him. In the end, he only got the money to make the film by ___***c***___(sell) his car. He was very unhappy about ___***d***___(do) this, but there wasn't any other way. He didn't get a lot of money for his car so, instead of ___***e***___(go) to Texas, he made the film in his house.

He saved a lot more money by ___***f***___(act) in the film himself. He was also responsible for ___***g***___(film) it, ___***h***___(edit) it, and ___***i***___(distribute) it. When the film was ready, Henry Brown took it to a cinema. Unfortunately, he was the only person who was interested in ___***j***___(see) the film. He was afraid of ___***k***___(lose) all his money, so he did a very clever thing. He got rid of all the tickets by ___***l***___(sell) them to himself.

4.3 Verbs as nouns

You can also use the *-ing* form of verb like a noun. How do you say these sentences in Korean?

Making a film takes a long time.
Acting is difficult.
Editing a film is very complicated.

Make some more examples. Choose a topic from Box A and use a phrase from Box B to write some sentences that are true for you.

Box A

Learning English	Swimming
Walking to school	Reading
Playing football	Singing
Watching TV every day	

Box B

is a good way to keep fit

is very enjoyable	is very easy
is very dangerous	is very boring
takes a long time	is very difficult
is very interesting	

5 *Say it clearly!* /ɪn/, /fə/, /əv/

Practise saying prepositions.

Henry Brown was interested in making a film.
He was responsible for distributing it.
He didn't get a lot of money for his car.

5.1 Weak prepositions

In English, prepositions are normally 'weak', without stress. For example, instead of saying 'for' as /fɔː/ we say /fə/. Listen and say these sentences.

I haven't seen her for a week. She went on holiday for a few days.

5.2 Some more examples

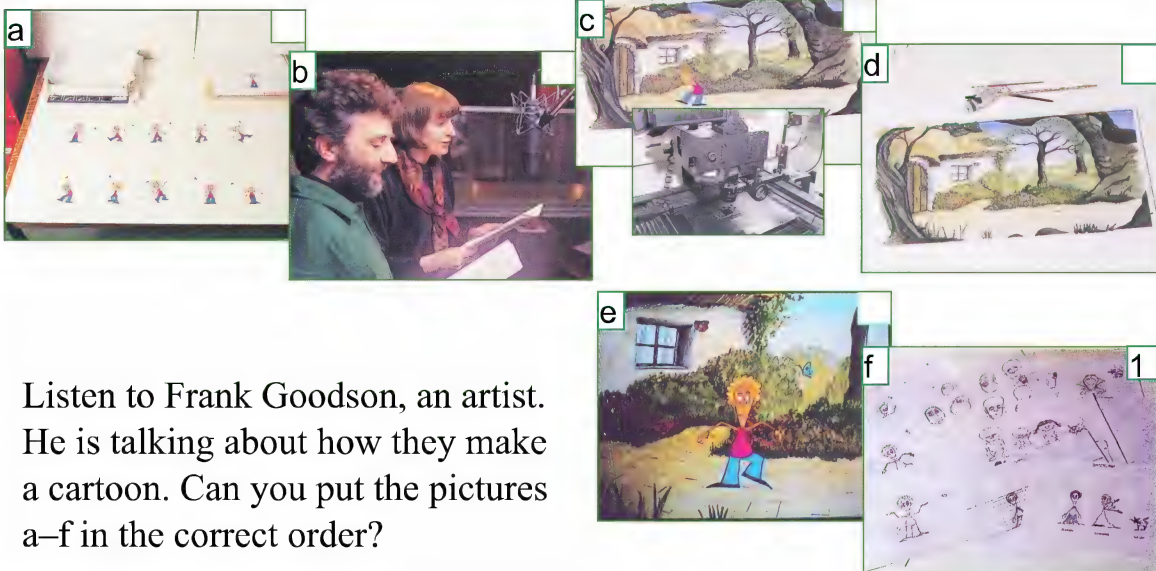
Read these sentences and underline the prepositions. (There are eight prepositions.)

Are you interested in seeing a film?
There's a good film on at the cinema.
It's about life in the future.
Instead of eating food, they eat tablets with lots of protein.

Listen carefully to the sentences. Then, play them again and say them.

6 *Listening* Making a cartoon

6.1 How do they do it?

Making a cartoon is very different from making a normal film. The most important people are not actors and actresses but artists.

Listen to Frank Goodson, an artist. He is talking about how they make a cartoon. Can you put the pictures a–f in the correct order?

6.2 The process

Check your answers to Ex. 6.1. Can you write the correct picture letter by each sentence?

- ☐ First, they draw some pictures to show what will happen.
- ☐ Next, they draw the pictures for the background.
- ☐ Then, on transparent celluloid, they draw the pictures that will change.
- ☐ When they have drawn all the ‘cells’, they put one ‘cell’ on top of the background picture and take a photograph. They do this many times.
- ☐ Finally, in a recording studio they add music and dialogue.
- ☐ In the cinema or on television, you see the pictures very fast and hear the dialogue and music. Your brain thinks that the characters are really moving!

7 *Language focus* Explaining a process

Look at the text in Ex. 6.2 again. Notice how you can explain a process:

First, they ... Next, they ... Then, they ...
When they have ..., they ... Finally, ...

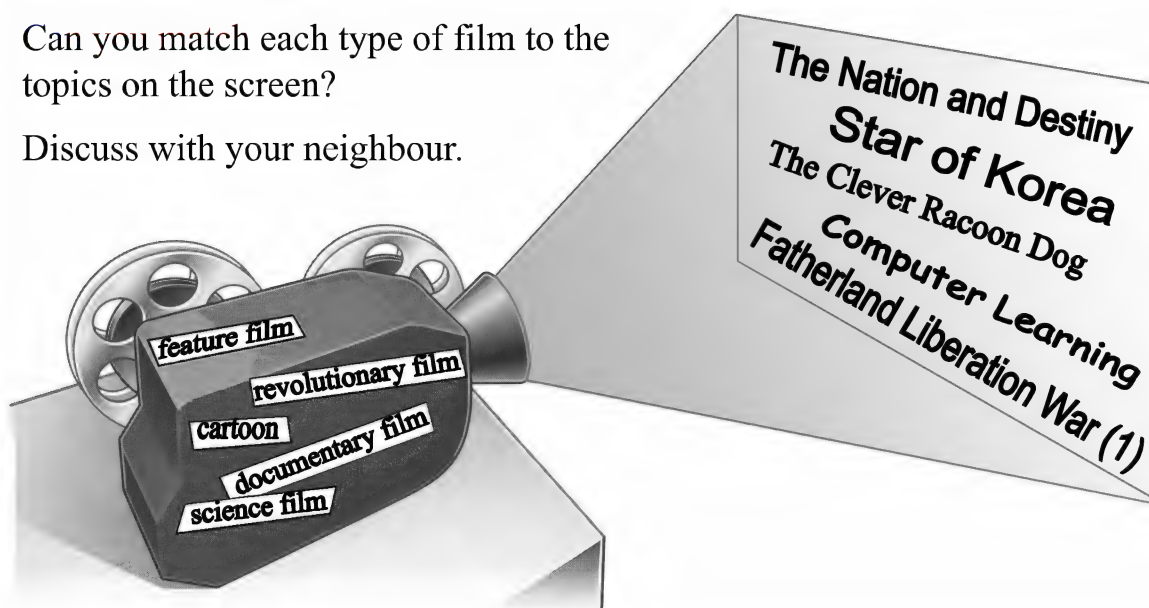
Think of another process. Make some notes about how they do it. Then, using your notes tell your neighbour and the class. Some ideas:

How they record a song — How they make a film
How they make electricity — How they make paper
How they build a house — How they make bread

Supplementary Exercises

1 *Discussion* Types of films

Can you match each type of film to the topics on the screen?

Discuss with your neighbour.

2 *Gerunds after preposition* **Making a man fly**

Read about how they make a man fly in the film. Can you complete the text with a gerund after each preposition?

Making a man fly

Special effects people are very good at making(make) things look real. By [1]..................(use) special techniques, they can make monsters move and talk, buildings burn and even entire planets explode.

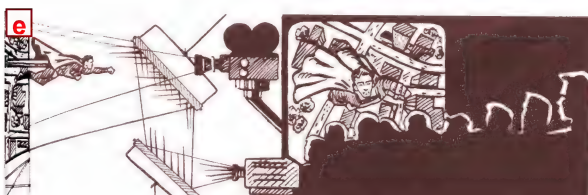
In some films, for example, special effects people are responsible for [2]..................(make) a man 'fly'. Instead of [3]..................(hang) him from an aeroplane, they build a special system with a screen and mirrors.

First, artists are responsible for [4]..................(paint) the background.

Then, they film the painting. By [5]..................(zoom) in and out they can make it bigger or smaller.

Next, the set builders have the job of [6]..................(build) a screen with a large metal 'arm' in the middle. When they have done that, they put man on the metal arm.

The camera people are now in charge of [7]..................(film) man. By [8]..................(use) mirrors, they project the background picture on to the screen. A camera then films man as he is 'flying' over the city.

By [9]..................(zoom) out and in, they can make man fly higher or lower over the city. Only the camera lens moves — man doesn't move at all!

3 *Explaining process* **Making a storm in the sea**

Sometimes they want to show a large ship in the sea, perhaps in a violent storm. How do they do that? Look at the pictures and explain what they do.

a. First, they ....

....

b. Then, ...

....

c. Next, ...

....

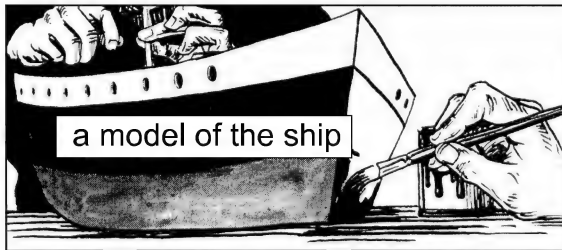
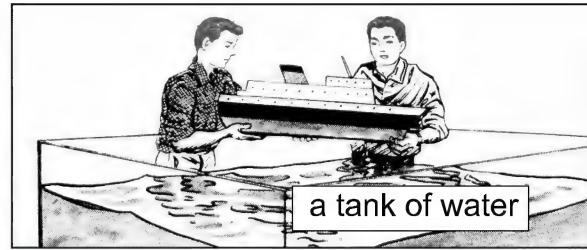
d. When they have done that, they ....

....

e. Finally, they ....

....

f. If they want a storm, they ....

....

a

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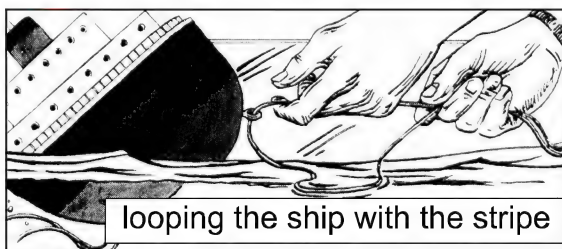
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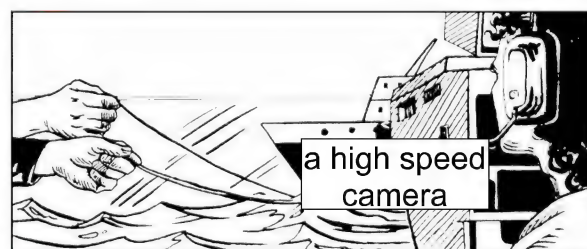
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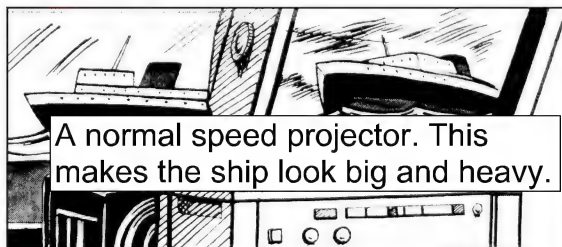
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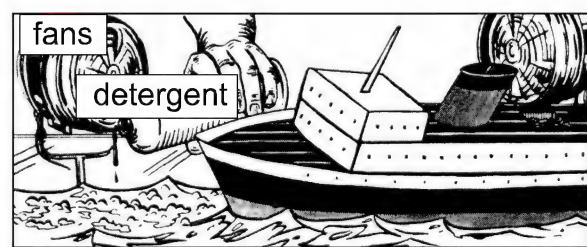

f

4 *Writing and speaking* **Talk to Maggi**

Write your answers to Maggi's questions.

Then talk to her on the cassette.

MAGGI: Hi. What are you going to do today?

YOU: ....

MAGGI: Well, I'm going to see a film. I like watching films. What was the last film you saw?

YOU: ....

MAGGI: Oh, I don't think I've seen that film. Where did you see it?

YOU: ....

....

MAGGI: What was it about?

YOU: ....

....

MAGGI: That's interesting. What happened in the film?

YOU: ....

....

MAGGI: Did you like it?

YOU: ....

....

MAGGI: Mmm. Perhaps I'll see it one day. What type of films do you like most?

YOU: ....

....

MAGGI: I like science fiction films. That's what I'm going to see today. I must go now. See you later!

YOU: ....

....

Massacre

Culture matters

1 *Discussion* **Indians?**

Have you ever heard of 'Indians'? Who are called 'Indians'?
Note down your answers to these questions:

Why do you think people call them 'Indians'?
Where in North America did they live?
How did they live? What did they eat?
Why did they fight white people?
Where do they live today? How do they live?
How many Native Americans are there?

Discuss your ideas with other students in your class.

2 *Reading* **The history of Native Americans**

2.1 Are you right?

Many of the stories about American 'Indians' are completely wrong. Read about the history of the Native Americans. Which questions from Ex. 1 can you answer now? Which questions can't you answer?

THE NATIVE AMERICANS

BEFORE COLUMBUS

When Columbus arrived in the Caribbean in 1492, he thought he had landed in the East Indies in Asia, so he called the people there 'Indians'. In fact, they were Native Americans, who had arrived in the Americas over 40 000 years before him.

At that time, Native Americans lived all over North America. Many of them lived in small groups of about 20–50 people. Most of them were very peaceful people, who lived by

hunting and collecting food. Other Native Americans lived in small villages where they had farms. The Native Americans were the first people to cultivate many of the plants that we now eat: potatoes, beans, maize, tomatoes, pineapples, cacao and many more. There were thousands of different languages and tribes, each with its own culture.

Europeans trading with the Native Americans

THE MASSACRE OF INDIANS IN AMERICA

When the Europeans arrived, they tried to take land away from the Native Americans and there were many wars. Millions of Native Americans also died from the diseases that the Europeans brought with them. As the Europeans took control over the eastern part of North America, the Native Americans had to move to the west in order to survive. After the United States became independent, white Americans moved further west into the lands where Native Americans lived, and there were many battles. Then, starting in 1830, the US Government forced the Native Americans to move even further west into 'reservations'. The Native Americans fought against this, and for many years there were wars against the white Americans, ending with the massacre of Sioux men, women and children at Wounded Knee in 1890.

2.2 What do you think?

Do you think what happened to the Native Americans is fair? What do you think should happen today?

3 *Listening* The Native Americans today

3.1 On the reservations

David Mulgee is a Native American who now works at the University of California. He is talking to Lyndsey Ban about the Native Americans today. Listen. Can you answer the last three questions in Ex. 1?

3.2 Listen again

Copy this list and listen to the conversation again. Can you complete the information?

Number of Native Americans today:
Number of reservations:
Most reservations have their own:
Industries on the reservations:
Problems on the reservations:

4 *Writing* **Decide...** Across cultures

Choose an exercise.

4.1 A quiz

Write a quiz with ten questions about the US imperialists invasion of our country. You can test your quiz with other students in your class.

4.2 The massacre of Sinchon

How many people were killed by the US imperialists only in Sinchon County during the 52 days of their occupation?
How did they kill 102 children and 400 mothers?
What does the Sinchon Museum lay bare?
Can we live with the US imperialists under the same sky?
If not, why?

Do some research and find out.
Write about the information you find.

Supplementary Exercises

Ways to writing (2): checking your work

You can see some more techniques to help you with writing.

IMPORTANT! You will need your work from Unit 7 (see S. Ex. 3 in Unit 7).

1 *Checking your work* **Check what you write!**

When you write something, it is important to check your work. You can do this in different ways. Try this now with your work from Unit 7.

You can ask a friend

Read your work and make a list of things you want to check. Then ask a friend. For example:

Is the grammar in this sentence correct?
Is this the correct spelling?
Is this clear to you?
How can I make it better?
Can I add something?

You can check the language

Check different things in your work. Here are some lists.

ORGANIZATION

Are the ideas in a logical order?
Are the paragraphs too long or short?
Should you use alternative words?

GRAMMAR

Are the verbs in the right form?
Are the words in the right order?
Are the prepositions correct?
Are the articles correct ('a' and 'the')?

SPELLING

For example:
plurals (e.g. '-y' to '-ies')
silent letters (e.g. ca*l*m)
double consonants (sto*pp*ing)
'h' in 'with' (NOT ~~wiht~~), 'the' (NOT ~~teh~~)

PUNCTUATION

capital letters at the beginning of sentences and names of people and places
full stops at the end of sentences
commas
apostrophes ('isn't', 'can't')

You can read it in different ways

Sometimes you can notice things if you read your work in different ways. For example:

Read it upside down

The best story I have read
was called 'On an island'.
In it, you have to imagine
that you are in the story.
You are on an eyeland and
you are trying to get home.
You have to deecide what you
are going to do. There are
many difficulties-for
example, there are sharks
in the watter, the weather
is bad and your raft sinks.

Read it through a 'window'

2 *Your frequent mistakes* Learn from your mistakes!

Often, people make the same mistakes again and again when they write. Look back at all your writing in English. Make a list of your frequent mistakes. Use your list to correct your work next time. It helps!

Revision and test
(Units 9–11)

Revision

1 *Past perfect* **I had never done that before!**

Yong Chol has just come back from an unusual trip. What is he telling his friend? Write a sentence for each picture.

It was fantastic! I did so many things. I had never drunk from an oasis before. I had never ...

a. I had never drunk from an oasis before.

b. ....

c. ....

d. ....

e. ....

f. ....

a b c d e f

2 *Explaining a process* **How do they make a tyrannosaurus move?**

Look at the pictures and explain how they make a tyrannosaurus move in the cinema.

First, ...

Then, ...

Next, ...
Then, ...
They do this many times. When they have finished, they ....
Finally, ...
The tyrannosaurus moves!

Listen and check your answers.

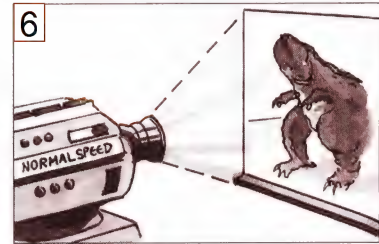
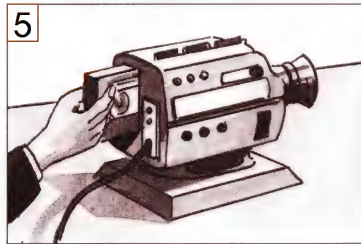
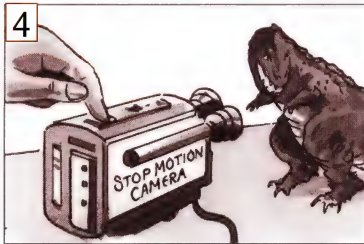
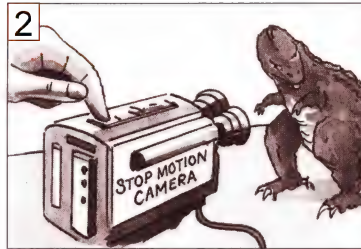
1

2

3

4

5

6

3 *Gerunds* The stunt actors

Read about stunt actors. Put a circle around the preposition and then complete the text with a gerund.

Listen and check your answers.

Dangerous work for stunt actors

Most 'film stars' do not want to do dangerous things. They are afraid (of) hurting(hurt) themselves! Instead, the director employs 'stunt' actors who are expert at [1]............(do) difficult and dangerous acts. For example, if the 'star' has to fall from a horse, a stunt actor who specializes in [2]............(work) with horses does it instead. The stunt actor has the job of [3]...........(fall) from the horse without [4]............(injure) himself. By [5]............(film) the face of the 'star'and the body of the stunt actor, the director tricks us into [6]..........(think) that the 'star' is really doing it.

Test yourself

1 The words you met

Can you write the correct words in the puzzle?

(1) The person who decides exactly what will happen in each scene of a film (***d***........)

(2) You see a film on a television or cinema ***s***........ .

(3) This is a ***c***........ .

(4) The casting director ***c***........ all the actors and actresses.

(5) The person who cuts and checks the film (***e***........)

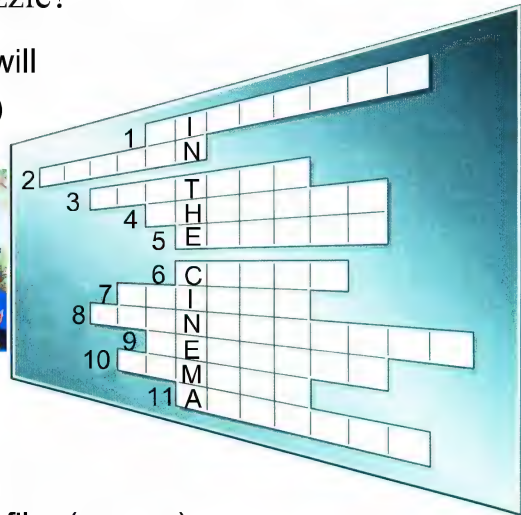
(6) A lot of people together (***c***........)

(7) The person who creates the story for a film (***w***........)

(8) If something is ***t***........, you can see through it.

(9) 'The Nation and Destiny' is a ***f***........ film.

(10) You take photographs with a ***c***........ .

(11) An actor is a man. An ***a***........ is a woman.

2 It happened because ...

Can you match the two parts of these sentences?

(1) My teacher was very angry with me yesterday because ...
(2) Hak Su couldn't play the guitar because ...
(3) I didn't see Hak Su at the party because ...
(4) Yong Chol knew the way to Nam Su's house because ...
(5) Last summer, I didn't play football because ...
(6) Last night I didn't have to do any homework because ...
(7) Yesterday, I walked home from school because ...
(8) I didn't go to the cinema with my friends because ...

a. ... I had done it before.
b. ... I had seen the film before.
c. ... I had broken my leg.
d. ... he had already left.
e. ... he had forgotten his music.
f. ... I had forgotten to take my bus ticket to school.
g. ... he had been there before.
h. ... I had forgotten to do my homework.

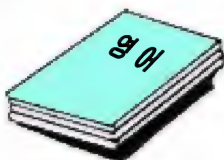
3 How to watch a video

How can you watch a film on video? Put the instructions in the correct order.

- ☐ When you have done that, you put the video into the video machine.
- ☐ Next, you switch the television and the video machine on.
- ☐ First, you take the video out of the box.
- ☐ Finally, you press the 'Play' button and watch the film.
- ☐ Then you set the television to the correct channel.

4 I'm interested in ...

Can you write the correct form of the verb in each gap?

a

I'm very interested in ....(learn) English.

b

He's very lazy, so instead of .... (walk) to school, he comes by bus.

c

She's good at .... (ride) a horse.

d

Are you afraid of ......(fly)?

e

He's very happy about .... (pass) his examination.

f

They bend metal by .... (make) it very hot.

Can you match the two parts of these sentences?

Playing the guitar ...

Sleeping only four hours a day ...

Eating lots of sweets ...

Skiing ...

... is very bad for your teeth.

... is a good way to relax.

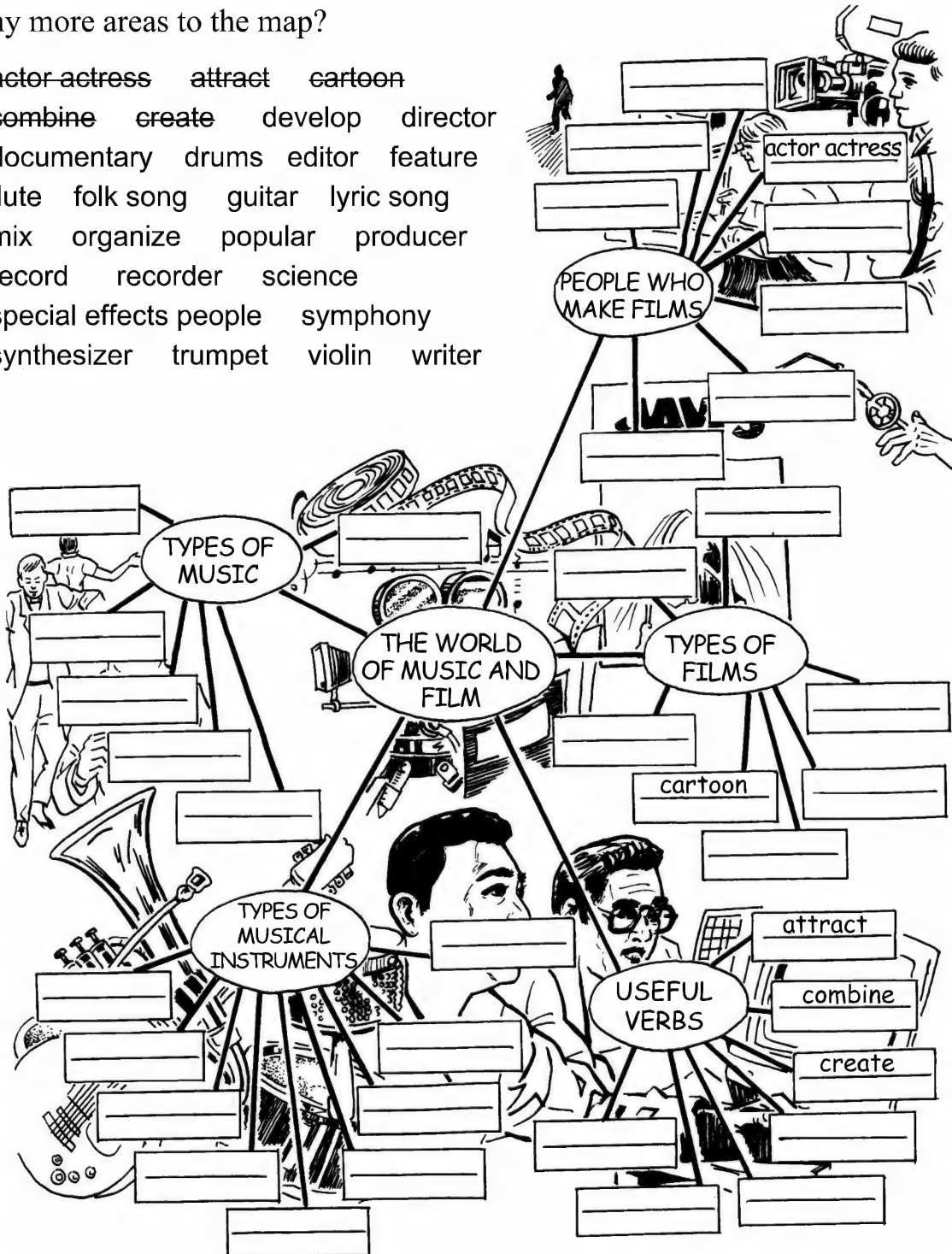
... is a difficult sport.

... is not good for your health.

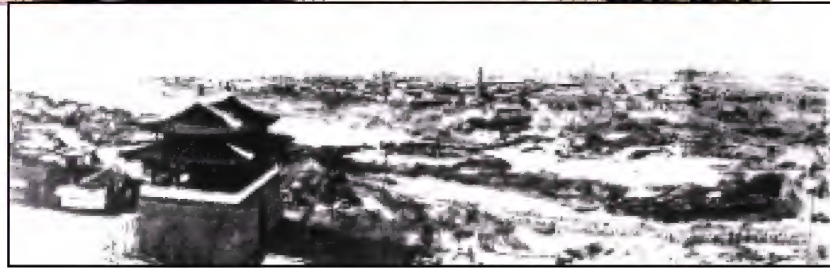
A vocabulary map (3)

THE WORLD OF MUSIC AND FILM

Write these words in the correct area of the vocabulary map. (Some words can go in two or more areas.) You can also add the meanings in Korean (in the bottom half of each box). Can you add any more words that you know or any more areas to the map?

~~actor actress~~ ~~attract~~ ~~cartoon~~
~~combine~~ ~~create~~ develop director
documentary drums editor feature
flute folk song guitar lyric song
mix organize popular producer
record recorder science
special effects people symphony
synthesizer trumpet violin writer

Theme D Changing views

Unit 13 Change

Topic and language

1 *Discussion* Changes

1.1 Changes where you live

Look at the pictures. Do you know a miserable story about Thosongnang? How has the area near the Pothong Gate changed since the country's liberation?

How has your school, town or country changed in the last few years? Think for a few moments and note down your ideas.

We used to have only a small library. Now we have a lot of books.

Our town used to be very small. Now it is much bigger.

We used to have only one school. Now we have three schools.

Tell the class your ideas.

1.2 People in our country

Think about the different people in our country. How have their lives changed in the last ten, or fifty years? Work with a partner and write some ideas under each heading.

Children's lives — *The lives of old people*
The lives of people in towns — *The lives of people in the country*

Write some sentences about your ideas and then tell the class.

Children's lives have changed a lot.
For example, in the past they used to ... but now ...
People in the country have a very different life today. In the past they used to ... but now ...

2 *Reading* Women's lives

2.1 True or false?

Read the following statements. Are they true (T) or false (F), do you think? Compare your answers with other students.

- ***a.*** There are more men than women in the world. ☐
- ***b.*** About 50% of the world's labour force is female. ☐
- ***c.*** In most places, women earn the same salary as men. ☐
- ***d.*** Boys usually do better than girls at school. ☐

2.2 Changes in women's lives

Before liberation the Korean women had no political rights and they got about half of men's wages for the same work. The Law on Sex Equality was published by the great leader Generalissimo **Kim Il Sung** in Juche 35(1946). Since then many women have worked as deputies to the Supreme People's Assembly and to all other levels of people's assemblies.
Many women have been awarded the title of Heroine, Professor, Doctor, People's Actress, People's Athlete or People's Teacher.

In many other countries, the lives of women have changed a lot in the last hundred years. What do you think has caused this change?

Read about changes in women's lives. Check your answers to Ex. 2.1.

You can listen to the text on the cassette.

Changes in women's lives

FOR MANY WOMEN IN THE WORLD, ***life today is very different from life in the time of their grandmothers. The changes have come very slowly, but in many countries women now take a more active part in society.***

There are many different reasons why this change has taken place. Part of the reason is industrialization. Many women moved away from rural areas where they used to work in agriculture, to the towns and cities where they started to work in industry. In Europe, however, the biggest changes came with the World Wars.

Working in factories

During World War Ⅰ (1914—1918) and World War Ⅱ (1939—1945), many men went away to fight. This meant that more and more women had to work outside the home. For many women, this was the first time that they were independent and that they had their own money. At the end of the war, they did not want to go back to the kind of life they used to have.

Voting in elections

In many countries, women also started to fight for the right to vote in elections and to make political decisions. Their votes were important, so male politicians had to start thinking about what women were asking for.

Education for women

Other important changes affected the lives of many women. First, in many countries more girls started to go to school. In the past, people used to send only their sons to school, not their daughters. Many people thought that education was too expensive to 'waste' on girls. In time, governments started to provide education for girls, and women were then able to get better jobs.

LIFE TODAY: SOME FACTS AND FIGURES

Life for many women has changed, but in some places it is still the same as it used to be 100 years ago.

- On average, women earn 65% of the salary of men.
- More than three times more women than men cannot read or write.

- In school, girls generally do better than boys but boys generally get better jobs when they leave school.
- In some countries, only 10% of the labour force is female.

Inside the text

A *Comprehension* **Linking ideas**

Find these phrases and sentences in the text. What do the words *like this* refer to?

(1) ... very different from life in the time of *their* grandmothers.
(2) ... *they* used to work in agriculture.
(3) ... *they* had their own money.
(4) ... *their* sons to school, not *their* daughters.
(5) ... *it* is still the same as *it* used to be.

B *Vocabulary* **Opposites**

Look at the words in Box 1. Can you find the opposite words in Box 2?

Box 1	Box 2
modern	traditional
son	industry
different	rural
urban	same
agriculture	daughter

3 *Don't say it clearly!* **Connected speech**

In speech we often say words together. Instead of saying *'They-used-to-work',* we say /ðeɪ ju:stəwɜ:k/.

3.1 Consonants and vowels

In English, people often join consonants and vowels together when they speak . (Vowel sounds are usually written with *a, e, i, o* and *u*. Consonants are all the other sounds.)

Listen and say these examples.

look at South America lots of things to do

Look at this postcard of Rio.

Rio's an enormous city in South America. The beaches are very beautiful and there are lots of things to do there.

3.2 Join the vowel and the consonant

Join the vowel and the consonant in these phrases.

a block of flats	a week or two
a map of the world	a hard exam
a bar of chocolate	a can of juice

Make a sentence with each phrase and say them aloud.

4 *Language focus* 'used to'

4.1 Past, present or future?

Look at these sentences. Are they talking about the past, the present or the future? How do you say them in Korean?

People ***used to*** send only their sons to school.
Many women ***used to*** work in agriculture.

What is the difference in meaning between each sentence in these pairs?

He ***used to come*** to our school.
He ***came*** to our school yesterday.

She ***used to play*** the guitar.
She ***played*** the guitar last night.

We ***didn't use to play*** football at primary school.
We ***didn't play*** football yesterday.

Can you find some more examples with 'used to' in the text in Ex. 2?

4.2 How to use 'used to'

You can use 'used to' to talk about things that happened regularly in the past and that don't happen now.

I ***used to go*** to bed at 9 o'clock. Now I ***go*** to bed at 10 o'clock.
They ***used to live*** in a house. Now they ***live*** in a flat.
She ***used to go*** to Kaeson Middle School. Now she ***comes*** to our school.

You can use 'used to' for all persons.

I You He/She/It We You They	used to live in a house. used to go to bed at 9 o'clock. used to go to Kaeson Middle School.

You can make questions with 'did' and negatives with 'didn't'.

What school ***did*** you ***use to*** go to?
I ***didn't use to*** walk to school. Now I walk to school every day.

You can also say:

I ***never used to*** walk to school.

4.3 What are the differences?

Look back at the picture of Pyongyang on page 99. How has Pyongyang changed? Write about the picture. For example:

In the past people used to live in small straw-thatched houses.
Today most of people live in apartment houses.

4.4 *Practice* When you were 11 ...

Interview your neighbour. Ask him/her about when he/she was younger.

Which school did you use to go to?
What games did you use to play?
What did you use to like to eat or drink?
What did you use to do at weekends?
What did you use to hate?
What did you use to watch on TV?
What time did you use to go to bed?
What did you use to look like?
Where did you use to live?

5 *Listening* Women's lives, a long time ago

Dr Hollett is talking about the lives of women 5 000 years ago. Can you complete the notes?

Compare your notes with other students.

There were two types of societies: ____ and ____.
In military societies, women had a ____ status.
In agricultural societies, women had a ____ status.
In Egypt, women ____.
In Crete, women ____.

6 *Fluency* All about ... boys and girls

6.1 What do you think?

Before you read the texts, discuss these questions with your class.

(1) What colours do boys and girls wear?
Does this change when they get older?
(2) Do adults talk to boys and girls in the same way?
(3) In traditional stories, what are the girls like?
What are the boys like?
(4) What types of toys do people give to young boys?
What types of toys do they give to young girls?

6.2 Search!

Look at part of a project that some students did about boys and girls. Which text is about each of the questions in Ex. 6.1?
Where do you expect to find the following phrases?

'they get more active toys'
'wear pink and the boys wear'
'the main girl character is usually "lovely"'
'What a nice dress!'

Read the texts to check your answers.
Do you think the same things are true in our country?

Girls and boys – Year 10's project

Clothes and colour

We were interested in the different colours which boys and girls wear. We looked in the clothes shops and catalogues. We noticed that when children are small, the girls often wear pink and the boys wear blue.

When the boys are a few years older, the clothes are much darker. They wear brown, black, grey or dark blue. When girls get older they often wear brighter colours – yellow, purple, bright green. We don't often see boys who are wearing yellow or pink when they are 13 or 14 years old.

Language differences

For our project, we recorded the things adults say to young boys and girls to see if there were any differences.

Many adults expect boys to get dirty, to be messy or to be loud when they play. They say things like 'Boys will be boys' or 'Boys are like that'. People often encourage boys to be strong. They say things like 'Be a big man', 'Don't be a baby!' or 'What a big, strong boy!'

Many adults expect girls to be quieter and more passive than boys. They often talk about a girl's clothes or how pretty she is. They say things like

'She's as pretty as a picture', 'She's a big help at home' or 'What a nice dress!'

Stories for young children

We went into a children's library and looked at old stories for very young children. We noticed that in many traditional stories, the main girl character is usually 'lovely' or 'beautiful' and is waiting for a 'handsome' prince. The other girls in the stories are often cruel or ugly. The main girl character never seems to have any friends. She seems very lonely.

The main boy character usually does all the exciting things – riding horses or travelling or chopping down trees. A lot of films also have these kinds of characters and stories in them.

Toys for boys and toys for girls

We looked at the different kinds of toys for boys and girls. Boys often have more freedom to run around and they get more active toys than girls – guns, train sets, sports equipment, cars and electronic games were the most popular toys for young boys. There are also many construction toys for boys. We think that toy manufacturers think boys are more logical than girls.

Toys for girls are much quieter and more passive. Young girls often get things like dolls, dresses, pictures to colour and toy kitchen tools.

6.3 What's the word?

Part of the reason why girls and boys are different is that people think about boys and girls in different ways. Read through the texts again. What adjectives describe boys? What adjectives describe girls? Make two lists.

Boys   Girls

Compare your lists with your partner.

Do people use words with the same meaning to describe boys and girls in Korean? Do you think they are correct?

7 *Decide...*

Choose an exercise.

7.1 Write an advertisement for a toy or a game that you think would be good for boys and girls of your age. Draw a picture and write about it. Say why it is good for boys and girls.

7.2 Write about the differences between your last school and your school now like this:

At my last school I used to finish lessons at 2 o'clock but now I finish at 4 o'clock.

7.3 What other differences do you think there are for boys and girls? Write about one of these topics.

sports activities
playing musical instruments
activities with friends

7.4 Decide what you want to do and ask your teacher. You could:

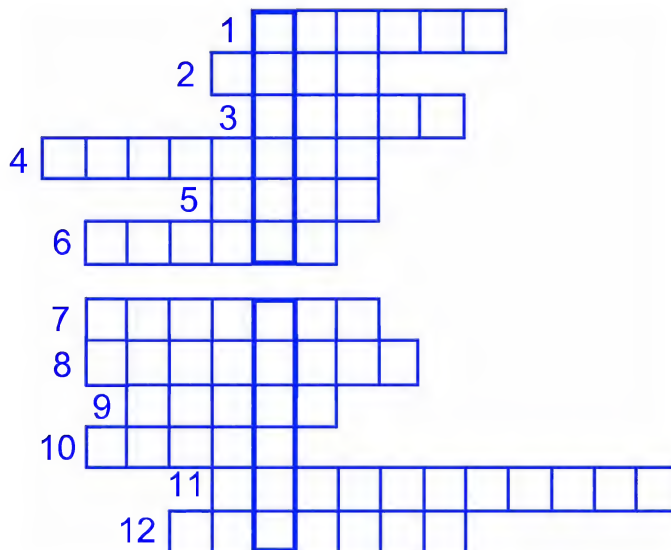
— write about being a girl or a boy.
— write about the toys that you think people should give to young children.
— make a puzzle.
— make a test.
— write some questions.
— write an exercise.

Supplementary Exercises

1 *Vocabulary* What's the word?

Read the clues and write the correct word in the puzzle. What does the puzzle spell?

agriculture	average	cruel
election	earn	female
logical	rural	salary
urban	vote	brighter

(1) The money people receive every month when they are working
(2) In an election, people ....
(3) In traditional stories, there is often one person who is very ....
(4) In many countries, there is an ...... every four years so that the people can choose the government.
(5) Many people in America ...... very little money every month.
(6) The opposite of 'male' is '......' .
(7) Somebody who thinks carefully, step by step, is very ....

(8) When girls get older, they often wear .... colours.
(9) In many countries, people move away from the ...... areas to look for work in the towns.
(10) Many ...... areas are now very overpopulated.
(11) In developed countries, more people work in industry than in ....
(12) On ...... women live five years longer than men.

2 *'Used to'; reading* Girls and boys at school

2.1 School subjects

This newspaper article is about examination results. Before you read, make a list of the subjects you do at school. Who does best at each subject – boys or girls?

Now read (and listen to) the article. Compare it with your ideas.

Who does better at Amanda's school – girls or boys?

This year's examination results show that girls are doing better than boys at the age of 16. Twenty years ago, girls used to get better results in Languages and History and the boys used to get higher marks in Maths and the Sciences. Now, girls are doing better in all subjects. There are many possible reasons why this has happened.

Girls have to be twice as good

Amanda, 17, from Bristol says:
'Girls want to be independent now. If you want a good job you have to work hard at school.'

Amanda's friend, Cathy, says:
'It's more difficult for women to get good jobs. They have to be twice as good as men to get the same job. We have to work harder!'

Work during the year

Mrs Armitage, a Chemistry teacher, comments:
'Ten years ago students used to get marks only for the examination but now they get marks for their work during the year. I think girls are more constant in their study so they often get higher average marks.'

Mr Evans, a Maths teacher, adds:

'In my experience, girls are serious about doing their homework. Boys are usually more interested in computer games and football!'

The exams

Ms Stephens, a head teacher, says:

'The exams have changed too. We used to ask students to remember a lot of facts but now they have to think more and give their own ideas. In general, girls seem to be better at this than boys.'

2.2 What do you think?

Some things in the article are FACTS. Other things are OPINIONS. Read the article again and underline the opinions. (Be careful! Opinions often look like facts!) Do you agree with each opinion? Write what you think. For example:

'Boys are usually more interested in computer games and football!'
I don't think this is true! A lot of boys ...

3 *Writing and speaking* Talk to Maggi

Write your answers to Maggi's questions. Then talk to her on the cassette.

MAGGI: Hi! What have you done today?

YOU: ....

MAGGI: Well, I looked at some old photos. My parents said when I was a baby I never used to sleep. What were you like as a baby?

YOU: ....

MAGGI: Oh, yes? I've got lots of photos of me at school. I remember I used to cry because I didn't understand Math. Did you use to be good at Math?

YOU: ....

MAGGI: My favourite subjects were Art and Science. What did you use to like at school?

YOU: ....

MAGGI: We used to live in the east of the UK then. Did you use to live in another town?

YOU: ....

MAGGI: Oh, that's interesting. I've got to go now. Talk to you soon. Bye!

YOU: ....

Can you believe your eyes?

Topic and language

1 *Reading* In the mind

1.1 Our eyes and our brain

Work with your neighbour. Read about how our brain helps us to see – and to see things that aren't really there.

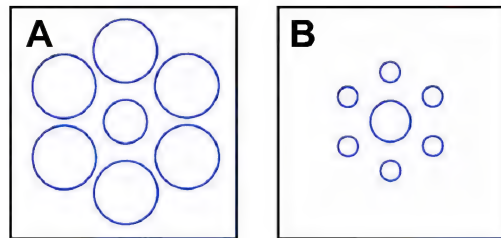
One of you can read the introduction and paragraphs 1, 2 and 3. The other one can read the introduction and paragraphs 4 and 5.

Tell your neighbour what 'your' paragraphs say.

Can you believe your eyes?

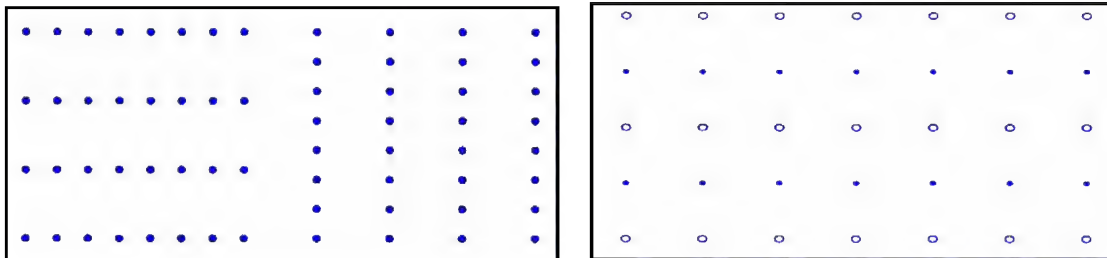
We use our brain to help us understand what we see. This is called 'perception'. We do this in different ways.

(1) SEEING CAN BE MAKING MISTAKES

In order to understand what we see, we use our eyes and our brain. Sometimes, our brain misunderstands the message which comes from our eyes and we 'see' something different from what is really there. We call this an 'optical illusion'.

Look at the circles in the middle of each diagram. Is the middle circle in diagram A bigger than the middle circle in diagram B? Is this circle bigger in B than in A? Are they both the same size?

(2) SEEING IS MAKING DESIGNS

We find it easier to make patterns between shapes which are close together.

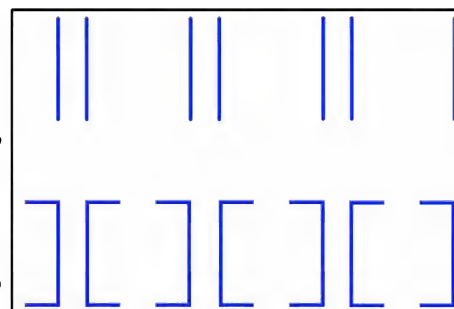
Look at the dots in the picture below on the left. What do you see? Do the dots go down, across or diagonally? Look at the dots in the picture below on the right. What kind of pattern do these dots make? Do they go down, across or diagonally?

(3) SEEING IS FILLING IN THE GAPS

When we read a sentence which has a word missing we try to guess what could be in the gap. In the same way, when we see only part of an object, we try to guess what the rest of the object is. Look at this picture. What object do you see? What can you guess?

(4) SEEING IS MAKING CONNECTIONS

When we see objects we try to make sense of them. When we look at patterns of dots or lines we like to find connections between them. Look at the seven lines in this picture.

Do you see:

- seven unconnected lines?
- two groups of three lines and one line?
- a group of four lines and a group of three?
- three groups of two and one extra line?
- some other pattern?

Different people see the lines in different ways.

(5) TRICKS OF THE LIGHT

Sometimes, nature can trick our eyes. Mirages, which many people have seen, are another trick of the light. Mirages happen when light passes from hot air to cold air or from cold air to hot air. This bends the light and causes an object to appear much closer than it really is. People who travel in deserts often see mirages of water and trees.

People who live in cold climates often see mirages of buildings. We can take photographs of mirages because the image is ‘real’.

A mirage in Antarctica

A mirage in Kenya

1.2 Things you don't understand

Now, with your neighbour, make a list of the words and phrases that you don't understand.

<u>Things we don't understand</u>
effective
what is really there

Look carefully at the text again. Can you guess the meaning of the words? Compare your ideas with others in your class.

1.3 More tricks with your eyes

Do you know any more optical illusions or tricks with your eyes? Draw some on the board for your class to see.

2 *Language focus* Relative clauses (1)

2.1 One sentence, two ideas

How do you say these sentences in Korean?

People who travel in deserts often see mirages.
Sometimes, our brain misunderstands the message which comes from our eyes.

These sentences have examples of 'relative clauses'. A relative clause gives you details about who or what the subject is. Look:

People ***who travel in deserts*** often see mirages.
Sometimes, our brain misunderstands the message ***which comes from our eyes.***

Look at these sentences. Can you underline the relative clauses?

People who are colour blind cannot see red and green very clearly.
People who lose the sight of one eye can still see quite clearly.
Many experiments which test perception are very well known.
Usually the things which we notice first are the biggest and brightest things.

2.2 'who' or 'which'?

Look at the sentences in Ex. 2.1 again. Why do some have 'who' and some have 'which'? Discuss it with your neighbour and try to make a rule. Tell the class your ideas.

2.3 Test your rule

Can you match the correct relative clause (a–e) to each sentence?

(1) The woman .... did not give her name.
(2) The dictionary .... was not in the shop.
(3) My friend .... now lives in Wonsan.
(4) The classrooms .... are very noisy.
(5) The students .... had to do extra homework.

a. who used to live next door
b. which are on the second floor
c. who came late
d. which I wanted to buy
e. who phoned last night

3 *Language focus* Relative clauses (2)

3.1 Kim Du Ryang's drawing

Your teacher will give you some information to read about Kim Du Ryang's drawing. When you have read it, look at the drawing. What can you see? Write a few sentences.

The man who is sleeping is a cowboy.

3.2 We see what we expect to see

Some years ago, some scientists tried an experiment with Kim Du Ryang's drawing. Read about what they did.

We see what we expect to see

In the experiment sixty people heard a story about a cowboy. They were in two groups of thirty. The stories were different. They heard them on a cassette. One story said that the cowboy was dreaming a pleasant dream. The other story said that the cowboy was dreaming a terrible dream.

Next, the sixty people looked at a drawing by Kim Du Ryang. The scientists told both groups of people that he had drawn the picture about a cowboy. The sixty people looked at the picture for only a few minutes. Then, they wrote about what they saw in the picture. The first group said that the cowboy in the picture was very happy. They had heard a story about a pleasant dream. The second group said that the cowboy in the picture was unpleasant. They had heard a story about a terrible dream. The scientists had proved an important point: we see what we expect to see.

Did you see what you expected to see? Look back at your sentences from Ex. 3.1.

Look back at the text. You can make one sentence from each pair of coloured sentences. Like this:

In the experiment sixty people heard a story about a cowboy. They were in two groups of thirty.

→ In the experiment sixty people, who were in two groups of thirty, heard a story about a cowboy.

Can you do the same with the other pairs of sentences? Remember, use 'who' for people and 'which' for things.

The stories, which they heard ...
The first group, who had heard ...

4 *Don't say it clearly!* Linking words

4.1 Linking words with /r/

Sometimes when we speak quickly, we link words with a small /r/ sound. Listen and say these phrases.

far away	Is the cinema far away?
four o'clock	We can meet at four o'clock.
harder and harder	School work gets harder and harder.
better at English	I'm better at English than Maths.

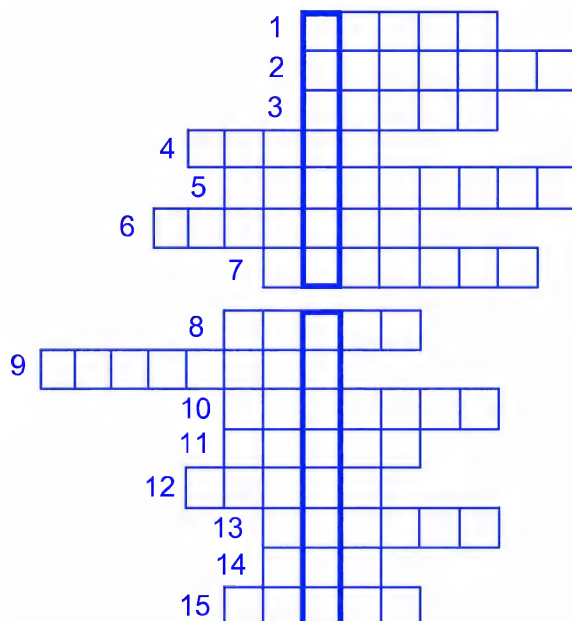
4.2 Linking words with /w/

We do the same thing with a small /w/ sound. Listen and say these sentences.

How are you?
Throw it in the dustbin.
Do you know if he's coming tomorrow?

Supplementary Exercises

1 *Vocabulary* What's the word?

Look at the clues and write the correct word in the puzzle. What does it spell?

believe bends blind brain
clearly diagonal dot guess
message mirage opera
pattern recognize trunk trick

(1) Have you seen the revolutionary .... 'The Sea of Blood'?

(2) This is a ....

(3) Light can play a .... on our eyes.

(4) This is a ....

(5) We haven't seen for a long time. You won't .... me!

(6) When we see something our eyes send a .... to the brain.

(7) When we can't see something .... our brain helps us to guess what it is.

(8) People who cannot see are ....

(9) This is a .... line.

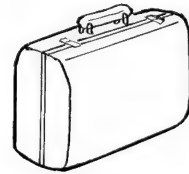
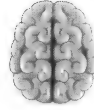
(10) We can't always .... what we see.

(11) Look! The big .... !

(12) 'How old are you?' '............!'

(13) In the desert, people often see a ....
They think it's water but it's just the heat and the light.

(14) This is a ....

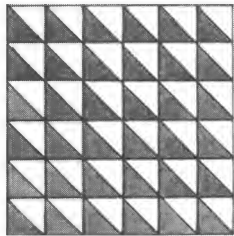
(15) Look! Light .... when it passes from air to water.

2 *Perception* What can you see?

2.1 The way you look at it

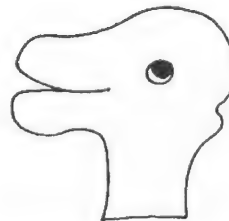
Look at the pictures. You can see two or three different things in each one if you look carefully. What are they? Write a title for each one.

1

....

....

2

....

....

3

....

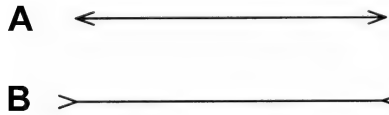
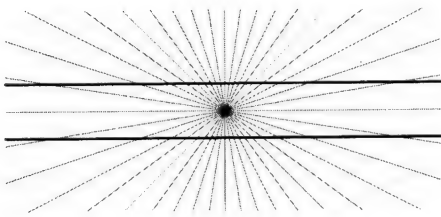
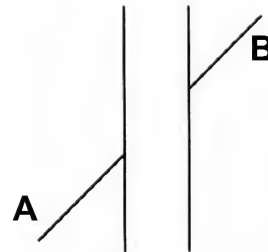
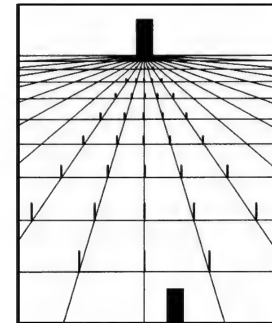
....

4

....

....

2.2 Optical illusions

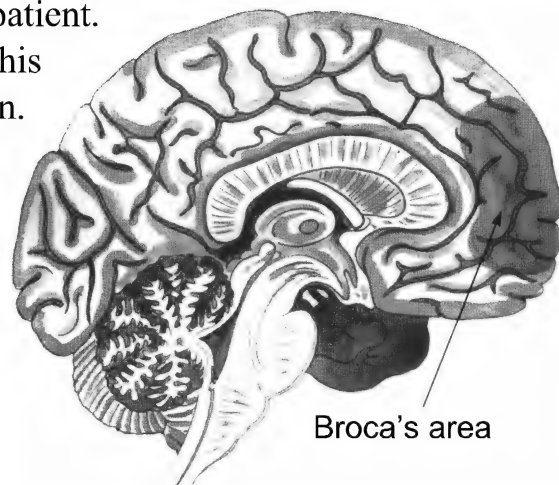
What does your brain think when you look at these drawings? How are they really? Write a sentence about each one.

3 *Relative clauses* Our brain

3.1 Language in the brain

Read about 'Broca's area' in the brain. Draw a circle around each relative clause ('who ...' or 'which ...') and show what it describes.

Broca's area

In 1861 Dr Paul Broca, who specialized in brain diseases, studied the brain of a new patient. The patient, who had problems with his speech, had damaged part of his brain. Our brain, which has two 'hemispheres', has different areas that control different parts of our body. Broca found that a special part of the brain, which we now call 'Broca's area', controls the mouth and tongue when we speak. Broca's area, which is on the left in right-handed people and on the right in left-handed people, is near the front of the brain.

Broca's area

Patients, who have damaged this area of their brain, often understand everything but have difficulty in speaking. Scientists, who have done a lot of work since Broca, have found that it is possible for other parts of the brain to learn to control speech.

3.2 One sentence from two

Make one sentence from two sentences by using a relative clause. Like this:

The human brain communicates with the body all the time. It is still a mystery for scientists.

The human brain, which is still a mystery for scientists, communicates with the body all the time.

(1) The brain never sleeps. It sends and receives messages twenty-four hours a day.
(2) Hundreds of years ago scientists studied the human brain. They wanted to find out if everyone's brain is the same size.
(3) They discovered that an adult brain is about 2% of our body weight. It weighs about 1 400 grams.
(4) The brain has about 10 billion nerve cells that carry the messages around the brain. They are called 'neurons'.
(5) Neurons do not grow again. They start dying the moment we are born.

Unit 15 Korea – homogeneous nation

Culture matters

Three Charters for National Reunification Memorial Tower

1 *Discussion* What do you know?

Do you know what nation is? What is difference between nation and country? Do you think each country has one nation? Which country has more than two nations? Which country has one nation?

Look at the picture. What is it? What does it show? What are the 2 women holding up? When was it built?

Discuss with your neighbour.

2 *Discussion and reading* Nation

2.1 Korea is one

What do you know about our nation? Do you know what a homogeneous nation means? When and by whom was Korea divided? What did we do for the national reunification?

- October, Juche 69(1980)
- July 4, Juche 61(1972)
- April 6, Juche 82(1993)
- June 15, Juche 89(2000)

Discuss with your partner what you can guess with those four dates. Tell the class about what you find out.

Are you right? Read the text.

Homogeneous nation

The Korean nation has been one ever since it came into being. It is a homogeneous nation that has lived in one and the same land for thousands of years. They spoke and wrote one language and had the same culture. Before liberation, under the Japanese imperialist colonial rule the Korean people had a very hard life and some of them went abroad to different countries.

The Korean nation was divided into the north and south by the US imperialists. It has lasted for more than half a century. They may have different political views and religious beliefs. But all the Korean people are the descendants of the Tangun nation origin, though they are in the north, south or abroad. It is natural for our Korean nation to fight to be one. Our biggest desire is national reunification.

The great leader Generalissimo **Kim Il Sung** set forth 3 principles of national reunification, 10-point program of the great unity of the whole nation for the reunification of the country and the proposal for founding the Democratic Confederal Republic of Koryo. They were defined as the 3 charters for national reunification.

The task of national reunification pioneered by the respected leader Generalissimo **Kim Il Sung** will be successfully achieved under the idea of 'By Our Nation Itself' set forth in the June 15 North-South Joint Declaration under the seasoned leadership of the great leader Marshal **Kim Jong Il**.

2.2 Quiz

Read the text. Answer this quiz.

(1) When did the first Americans arrive in America?

a in the 1600s
b between 1820 and 1860
c about 40 000 years before Columbus
d from 1820 to 1920

(2) Where did the first people come from?

a. Europe
b. South America
c. Africa
d. Asia

(3) What do these numbers and percentage refer to?
For example:

32 million (about 13%):
About 32 million Americans (about 13% of the population) have English ancestors from over 300 years ago.

30 million (about 12%): ....
58 million (about 23%): ....
2 million (about 0.8%): ....
39 million (about 15%): ....
25 million (about 9%): ....
7.5 million (about 3%): ....

A MELTING POT

The first Americans were the Native Americans – there are about 2 million of them today, about 0.8% of the population. Their ancestors came to America over a 'land bridge' from Asia 40 000 years ago before Columbus.

Many, many years later, in the 1600s, people arrived from Europe. The first groups came from England and France. Today about 32 million Americans (about 13%) have English ancestors from over 300 years ago.

The Europeans also took people by force from Africa to work for them in the 'New World'. As slaves they had a very hard and difficult life, and many of them died during the journey to America or on tobacco and cotton farms. There are about 30 million black Americans (about 12% of the population) in the United States today and most of these are descendants of slaves.

More recently, people have come to the United States from other parts of the world. Between 1820 and 1860 many people came from Germany and Ireland – about 58 million (about 23%) of Americans have German ancestors, and about 39 million (15%) have Irish ancestors. From 1860 to 1920 many more people came from other European countries including Russia, Poland, Greece, Turkey and Italy.

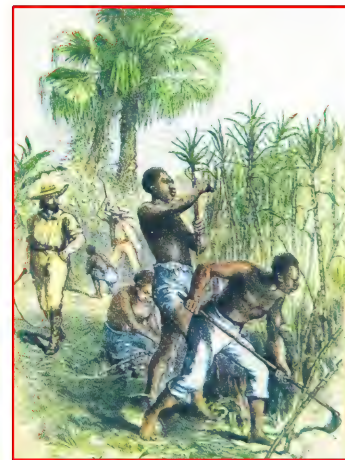
Today, the fastest growing group in the United States is Hispanic. There are about 25 million Hispanics (about 9% of the population) in the United States who come from Spanish-speaking countries such as Cuba, Mexico and Puerto Rico. There are also large numbers of people from Asian countries. In total, there are about 7.5 million Asian Americans (about 3% of the population).

Since the United States is a melting pot, they have no their own long history, national tradition and rich culture like Korea, a homogeneous nation.

3 *Listening and discussion* Slavery, a crime against humanity

3.1 The life of a slave

Read about slavery in America.

> Slavery existed in America for hundreds of years, until 1865. Slaves had no rights at all – they were the property of their owners. They lived in very bad conditions, received minimal amounts of food and were treated very badly. Many slaves tried to escape but, if they were caught, they were punished very hard.

3.2 A long journey

Many black Americans are now trying to find where their ancestors came from. Listen. Janis Harvey is talking about her family history. What happened on these dates? Work with a partner. One of you choose list A, the other list B. Note down your answers.

List A: 1985 1845 1865
List B: 1870 1834 1996

Listen again. Check your partner's notes.

4 *Writing* Decide... Across cultures

Choose an exercise.

4.1 The nation and destiny

Have you seen the multi-part feature film ‘The Nation and Destiny’? Do you know about the inhumane crimes commited by Japs against Korean people? Why do they call our nation **Kim Il Sung**’s nation?

Write about what you think.

4.2 The overseas compatriots today

What is the overseas compatriots organization Chongryon? Do you know about education under the Chongryon? Why are the Korean schoolgirls in Japan wearing the Korean Chima and Jogori?
Where are the overseas compatriots organizations? What do they do there for the reunification of the fatherland?

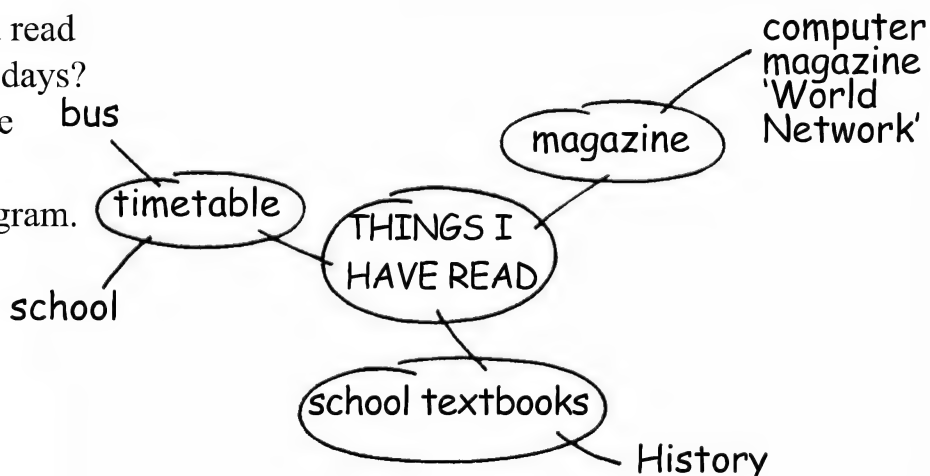
Write about what you know.

Supplementary Exercises

Ways to reading (1): scanning

You can see a technique to help you with reading. ‘Scanning’ helps you to find information quickly. Here you can try ‘skimming’ which helps you with the general meaning of a text.

1 Different texts – different reading

What have you read in the last four days? Add some more things to the brainstorm diagram.

Did you read them all in the same way? Which ones did you read fast? Which ones did you read slowly?

2 Scanning

2.1 Lists, timetables, dictionaries ...

We can ‘scan’ lists to find information quickly. Here are some examples. Look at the texts and find:

(1) a train which leaves Hamhung after 12.00.
(2) the word ‘frequent’.
(3) the page number of ‘Unit 3’.

Unit 5

islet / ˈaɪlɪt / ***n*** 작은 섬

pleasure / ˈpleʒə/ ***n*** 기쁨

pleasure ground 유원지

open-air / ˈəupənˌeə/ ***a*** 야외의, 바깥의

frequent / ˈfriːkwənt/ ***a*** 자주, 빈번히 일어나는 ***v*** 빈번히 다니다, 늘 모이다

environmental / ɪnˌvaɪərənˈməntl/ ***a*** 환경의

concept / ˈkɒnsept/ ***n*** 개념

Contents

혜산방면→

평양-혜산		평양-만포-혜산		해주-혜산	
1 급 2		3 급 4		104/107 준급 108/111	
평 양	10.50	서평양	18.15	해 주	20.20
평 성	12.00	신안주	20.28	사리원	23.15
신성천	13.32	개 천	21.25	평 산	0.57
거 차	15.04	희 천	0.13	세 포	6.00
고 원	17.10	강 계	5.12	원 산	9.25
함 흥	19.23	만 포	7.14	고 원	10.40
단 천	1.35	자 성	9.49	함 흥	13.10
길 주	4.20	포 평	13.27	길 주	23.50
백 암	6.41	신 파	15.45	백 암	2.10
혜 산	9.09	혜 산	17.43	혜 산	4.35
혜 산	17.20	혜 산	10.35	혜 산	6.10
백 암	20.01	신 파	12.49	백 암	9.03
길 주	22.50	포 평	15.00	길 주	12.25
단 천	1.37	자 성	18.16	함 흥	21.46
함 흥	7.45	만 포	21.07	고 원	0.20

2.2 Try again

Try again! Look at the contents page.

(1) What page does Unit 5 start on?
(2) What is the first page of Unit 9?
(3) What is Unit 5 called?
(4) What page is 'Save the Earth!' on?

2.3 Long texts

You can also scan long texts to find certain information quickly. This is the text in Ex. 2.1. How fast can you answer these questions? Look at your watch!

(1) Where did they live?
(2) When did they go abroad?
(3) Why did Koreans go abroad?
(4) Why was our nation divided into two?
(5) How long does it last?

The Korean nation has been one ever since It is a nation that has lived in land for thousands of years. They spoke and wrote one the same culture. Before liberation, under the Japanese imperialist colonial rule and some of them went abroad to different countries.
The Korean nation was divided by the US imperialists. for more than half a century.

2.4 Try it yourself!

Look at the rest of the text in Ex. 2.1. Find the answers to these questions as quickly as you can:

(1) What was defined as the 3 charters for national reunification?
(2) What is the most important idea of the June 15 North-South Joint Declaration?
(3) What is our biggest desire?
(4) What is natural for us Korean nation?

Unit 16 Revision and test
(Units 13–15)

Revision

1 *Vocabulary* The words you met: word pairs

Here are some of the words you saw in Units 13 – 15. In each group, we often use the first word with one of the three following words. Choose the correct word ***a, b*** or ***c*** to make a 'word pair'.

For example:

	traditional	***a*** wages	***b*** property	***c*** way of life (circled)
(1)	equal	***a*** female	***b*** agriculture	***c*** opportunities
(2)	rural	***a*** equality	***b*** areas	***c*** status
(3)	gradual	***a*** land	***b*** work force	***c*** change
(4)	noisy	***a*** games	***b*** medicine	***c*** power
(5)	high	***a*** status	***b*** power	***c*** business
(6)	popular	***a*** education	***b*** toys	***c*** factories

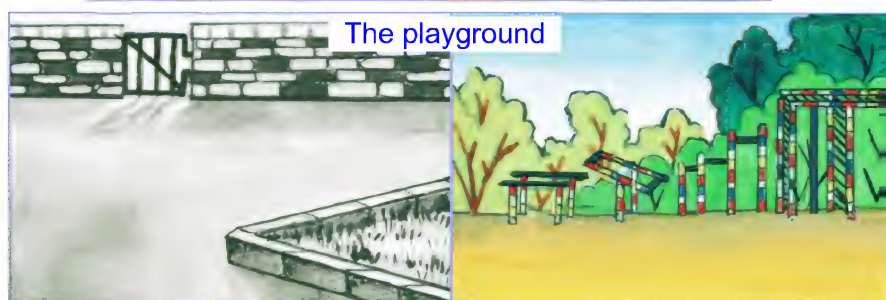
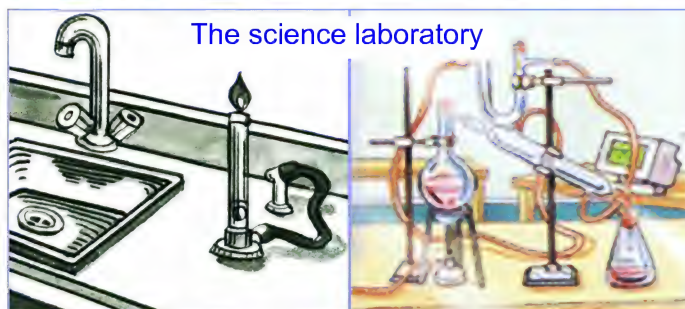
Now complete these sentences with the correct word pair.

(1) In ancient Crete, women had ....
(2) The most .... for boys are balls and bicycles.
(3) In .... people often find it difficult to change their way of life.
(4) There has been a .... in many women's lives in this century.
(5) Women in many countries do not have .... with men today.
(6) Many adults think that girls do not like ....

Can you make any more word pairs from Units 13 – 15?

2 *'used to'* Everything used to be so different!

2.1 The school news

Look at the pictures. Write about the changes in the school.

School News

Last week Mr Kim, who used to come to our school, sent us these old photos. Everything is so different now! Look how the school has changed. The playground used to have nothing in it. Now we've got equipment to play on!

2.2 Changes in your town or school

Write five sentences to describe changes in your school or town. For example:

Our school used to be very small but now there are about 2 000 students here.

2.3 How do you use 'used to'?

Are these sentences true or false? Write 'T' or 'F'.

(1) 'Used to' is the same for all persons (I, you, he, we, etc.). □
(2) After 'used to' you use the infinitive. □

(3) We use 'used to' to talk about something which happened regularly in the past. □
(4) The negative of 'used to' is 'didn't use to'. □
(5) We often use 'used to' when we talk about something which has changed. □

Find some examples in Unit 13 to prove your answers. Compare with other students in the class.

3 *Relative clauses (1)* **In the library**

Look at the picture. Can you answer questions (1)–(7)? Write your answers.

Who has got glasses?

The woman who is writing a letter

(1) Who is talking on the telephone?
(2) Who is choosing a book?
(3) What is the girl looking for?
(4) Who is listening to English?
(5) Who is reading a book?
(6) Who is working with computer?
(7) Who are discussing?

4 *Relative clauses (2)* **Born or not made?**

Look at the diagram of the human brain.

Read about the brain and complete the gaps in the text with the relative clauses a–f.

a. ... which is responsible for music and colour ...
b. ... who have studied babies' brains ...
c. ... which has two hemispheres or parts ...
d. ... who watch children's development ...
e. ... which is responsible for number and logic ...
f. ... who talk to boys and girls in different ways ...

Some scientists, who have studied babies' brains, say they have found differences between boys and girls. They say the brain, ..., develops differently in boys and girls. They say the left side of the brain, ..., develops earlier in girls. The right side of the brain, ..., develops earlier in boys. Other scientists, ..., say that children learn these differences from other people. They say that adults, ..., 'teach' children to be different.

Logical left — Words, Number, Logic, Sequence, Analysis

Creative right — Music, Colour, Space, Images, Dreams

Test yourself

1 *Vocabulary* What's the word?

1.1 Find a pair

Join the words in List A with the correct words in List B to make a verb phrase or noun.

List A	List B
vote in	force
earn	illusion
make	place
take	sense of something
an optical	area
a labour	the light
a trick of	an election
a rural	a salary

1.2 Use the phrases

Can you complete these sentences with the correct phrase from Ex. 1.1?

(1) In many countries 40% of the l............ f............ are women. However most of them do not e............ a large s............ .

(2) People often say about an o............ i............ caused by a t............ o............ t............ l............ .

(3) We see many unusual or incomplete images every day, but our brain tries to m............ s............ o............ them.

(4) When people are 18 years old in many countries, they can v............ i............ a............ e............ . Elections t............ p............ every four or five years in many countries.

(5) Young people often leave r............ a............ to look for work in the cities.

2 *'used to'* Irian Jaya, Indonesia

Irian Jaya is a part of Indonesia. David Watson is talking to Efradus Basan about how life has changed there. Look at the notes on the note pad and complete the dialogue.

DAVID: Efradus, tell me about the changes in Irian Jaya.

EFRADUS: Well, Irian Jaya *used to be isolated*. Now tourists come from everywhere.

DAVID: How has life changed?

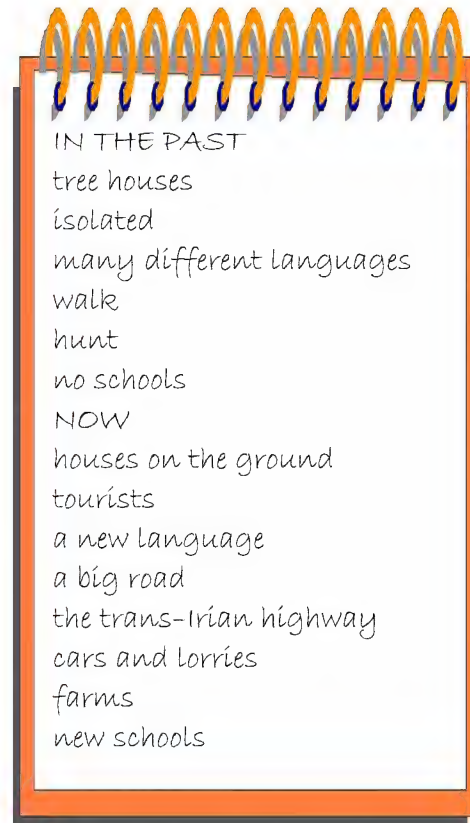
EFRADUS: Well, the first big change is our houses. In the past, many people [1]............... but now they build houses on the ground.

DAVID: And what language do you speak?

EFRADUS: Well, we [2]............... but now we are learning a new, official language.

DAVID: And how do you travel around the island?

EFRADUS: In the past, we [3]............... everywhere but now there is a big road and people [4]............... .

IN THE PAST
tree houses
isolated
many different languages
walk
hunt
no schools
NOW
houses on the ground
tourists
a new language
a big road
the trans-Irian highway
cars and lorries
farms
new schools

DAVID: How do people get food to eat?
EFRADUS: In the old days, we [5]............... but now we grow vegetables and have small farms.
DAVID: I see. And are there any schools here?
EFRADUS: Yes, there are new schools here now but I [6]............... .
DAVID: So what do you think about the changes?
EFRADUS: Well, we can't go back now.

Listen and check your answers.

3 *Relative clauses (1)* Make one sentence

Make one sentence from two sentences by using a relative clause.

(1) In Indonesia half the people are under twenty years old. It has a population of 180 million.

In Indonesia, which has a population of 180 million, half the people are under twenty years old.

(2) Indonesia is about 4 500 kilometres wide. It has five large islands and over 300 smaller ones.

(3) Many Indonesians work in the oil, gas and timber industries. They live in big cities like Jakarta, Surabaya and Bandung.

(4) Indonesia has very good land to grow rice. It has 100 active volcanoes.

4 *Relative clauses (2)* Definitions

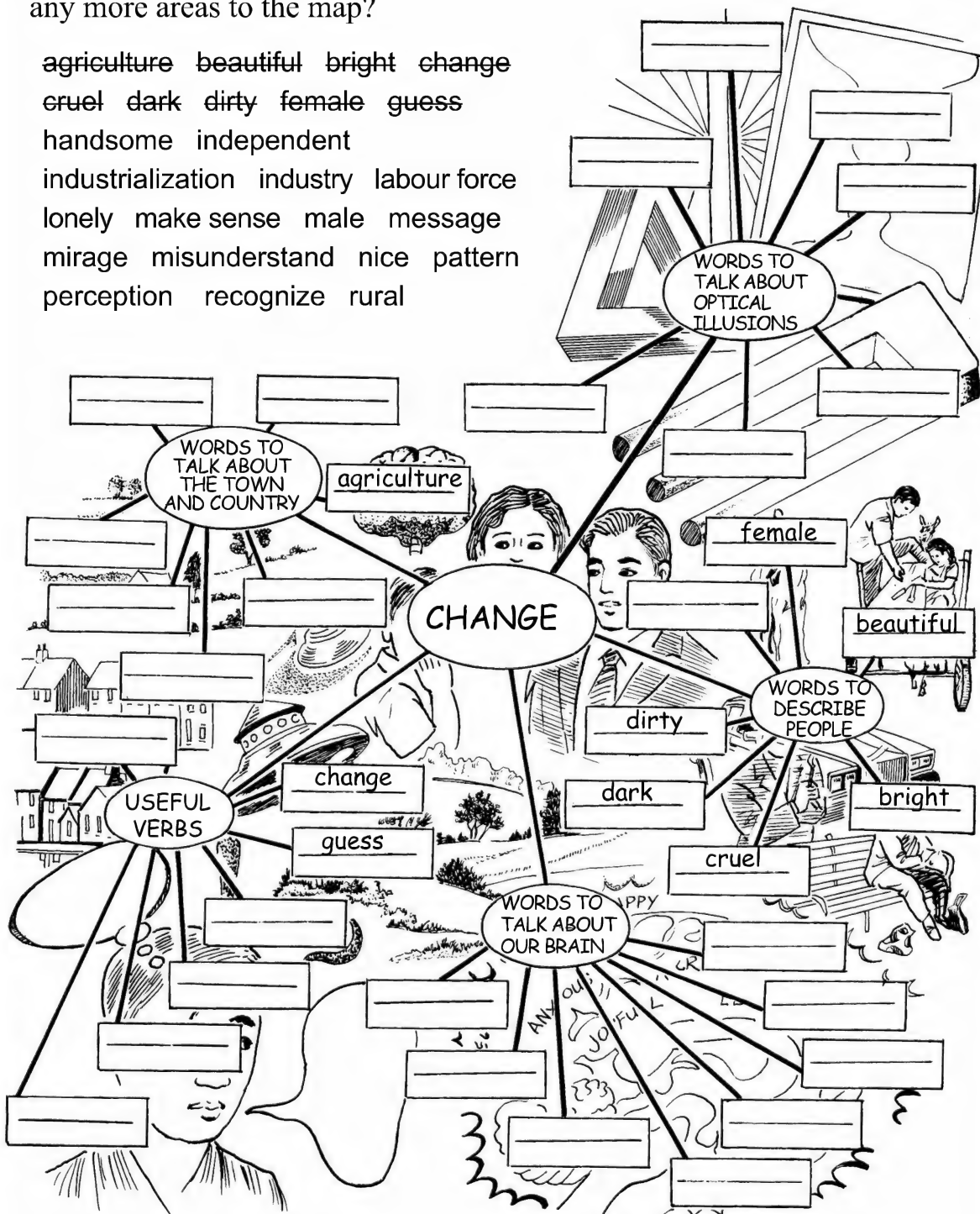
Can you join the words to make complete definitions?

(1) A cassette player			gives the meanings of words.
(2) An author	is a book		grows crops or has animals.
(3) A camera		who	gives us information.
(4) An archaeologist	is a person		studies things from the past.
(5) An encyclopedia		which	writes books.
(6) A calculator			does mathematical calculations.
(7) A farmer	is a machine		takes photographs.
(8) A dictionary			plays recordings.

A vocabulary map (4)

CHANGE

Write these words in the correct area of the vocabulary map. (Some words can go in two or more areas.) You can also add the meanings in Korean (in the bottom half of each box). Can you add any more words that you know or any more areas to the map?

~~agriculture~~ ~~beautiful~~ ~~bright~~ ~~change~~
~~cruel~~ ~~dark~~ ~~dirty~~ ~~female~~ ~~guess~~
handsome independent
industrialization industry labour force
lonely make sense male message
mirage misunderstand nice pattern
perception recognize rural

Theme E From space to screen

Unit 17 The news

Topic and language

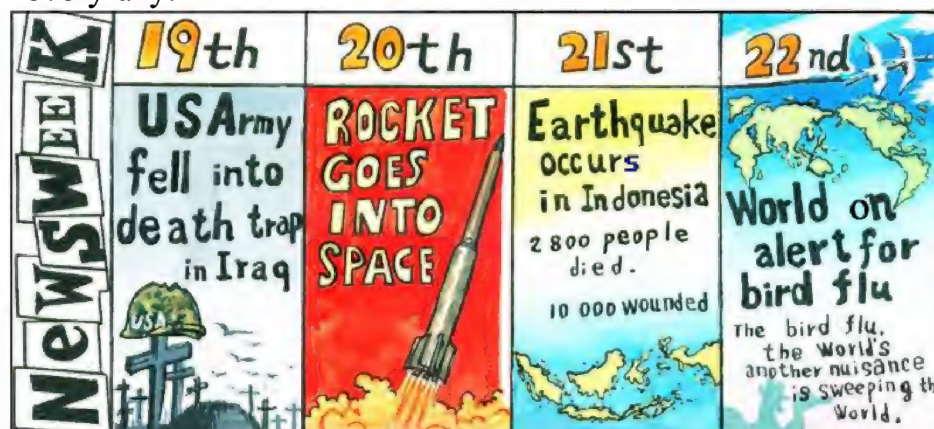
1 *Discussion* Think about the news

1.1 You and the news

Look at the picture. What tower is it? How do you get to know the news? Do you watch the news on TV? Do you listen to the news on the radio? Do you read a newspaper regularly? Do you think the news is interesting?

1.2 Make a news poster

What's in the news this week? Which news stories can you remember?

You can make a poster about the news. Write the news headlines and some details about each story. Add more news stories to your poster every day.

2 *Reading* What is news?

2.1 News stories

Here is the list of news stories made by Gail Duncan's staff. Read it. Which stories do you think should be on the TV news? Why? Why not? Which types of stories should be the main news?

2.2 What's in the news?

Here are some of the main types of stories on the TV news. Can you match each story from Ex. 2.1 to the correct type?

politics   crime   foreign news   science
home news: personal stories   economics
home news: serious   sport

3 *Reading and listening* Stories on the news

Gail Duncan is a chief news editor. Every morning she has a meeting with an assistant news editor, a producer and different correspondents. At the meeting they choose the news stories for the day.

Listen. Which six stories do they choose?

Look back at the list of types of stories in Ex. 2.2. Which type of stories did they choose?

Why did they choose each story? Read this list of reasons and listen again. Match each reason to a story.

a. People are worried about education. *Schools and books*
b. It's about a very popular sports person.
c. It's a political story and they have interviews with politicians.
d. It's an unusual story and they have an interview on tape.
e. It's a mysterious story.
f. Everyone likes to hear about good luck.

4 *Don't say it clearly!* Silent letters

Many words have letters which we do not say.

Say these words out loud. Circle the letters we do not say.

half an hour   foreign   talk   listen   know

4.1 Listen to the silence

Many words have letters which are silent. Listen to these words and put a circle around the silent letters.

column	half	often	talk
listen	know	would	

4.2 Say the sentences

Now listen and say these sentences. Put a circle around the silent letters in the underlined words.

Last Wednesday, two men climbed a mountain in India. They did it in 24 hours. They do it every autumn. Why? Their answer is very simple: they love climbing mountains!

Question tags

5 *Language focus*

5.1 What do you say?

How do you say these sentences in Korean?

He is a very popular footballer, isn't he?
We've got a lot of film of that, haven't we?
He made a quick recovery from a tragic sickness, didn't he?

These are examples of 'question tags'. Read the sentences again.
Why do you think we use them? Tell the class your ideas.

5.2 Different uses for question tags

We normally only use question tags when we are speaking (not writing).
You can use question tags:

— if you expect people to agree with you.
— if you want to check something.

If you expect someone to agree, make your voice go down.

That was an interesting programme, wasn't it?

If you want to check something, make your voice go up.

Her name's Sun Hui, isn't it?

Listen. Are the people expecting someone to agree or are they checking? Draw an arrow up or down .

It's very nice today, isn't it?
The new History teacher's nice, isn't she?
His name's Juan, isn't it?
You're from Brazil, aren't you?

You can come on Saturday, can't you?
This Maths homework isn't very hard, is it?

5.3 How to form question tags

Look at the question tags in Exercises 5.1 and 5.2 again. How can you make question tags? Match the two halves of the sentences to make a rule.

If the sentence is positive, ... you use a positive question tag.
If the sentence is negative, ... you use a negative question tag.

What verb and subject do you use in a question tag? Look at the sentences in Exercises 5.1 and 5.2 again. Tell the class your ideas and then check in the *Grammar summary*.

5.4 Check your idea

TV reporters are trying to find out about a volcanic eruption. Fill in the gaps in the sentences with one of these question tags.

aren't they? are you?
are they? isn't it?
is there? have there?

5.5 Other verbs

When the verb in the main sentence is an auxiliary or modal verb ('be', 'can', 'have', 'should', 'will', etc.) you use the same verb in the question tag. With all other verbs you use the verb 'do' in the question tag. Look:

Can you complete the question tags in these sentences?

Look! That's Kim In Chol, isn't he? He doesn't work at night, ...?
No, he goes home at 5 o'clock, ...?
Who are those two men with him? They look unfamiliar, ...?
Yes. They've got something in their hands, ...?
What's the matter with Kim? He doesn't go anywhere after he leaves school, ...?
No, he helps Pak with his study, ...?
Look. Kim is waving to us, ...? Come on, let's find out where they're going.

6 *Fluency* All about ... the news

6.1 Search!

Look at the titles of the news stories.

(Don't read the stories yet.) Which story do you think will tell you about:

a. the work of international medical teams?
b. new information about how the continents have moved?
c. the weather in the Himalayas?

Read the texts and check your answers.

Fires in Mongolia

Fires are still spreading across Mongolia. This is the fourth week. Five thousand people have left their homes. Two hundred people have been killed or injured by fire and smoke and falling trees. One thousand square miles of forest have disappeared. The rivers are dry.
The international medical teams, Red Cross and Medicines sans Frontières, are arriving with medical supplies.

Two climbers have disappeared on Mount Everest

Ben Chapman and Jessie Martin, the famous mountain climbers, are still missing on Mount Everest. Chapman and Martin left South Col camp on Sunday. South Col is the last camp on the mountain before the peak. All climbers know that they have to get up to the peak and back before the weather changes or before they have bad altitude sickness. The weather is very bad at the peak at the moment.

New dinosaurs!

An international team has discovered the bones of two new species of dinosaurs in the Atlas mountains, Morocco. The dinosaurs lived more than 90 million years ago. One of the dinosaurs had very sharp teeth which shows that it ate meat.
'The most interesting thing about this dinosaur is that it is similar to a dinosaur that another team found in Argentina last year,' said Angela Milner from the Natural History Museum. 'This tells us a lot about how the continents used to be connected and when they started to break up.'

6.2 Key words

These are the key words from three sentences in the text about Mount Everest. Without looking at the text again, try to write the three sentences.

Sentence 1: Bob Chapman and Jessie Martin   famous   missing   Mount Everest

Sentence 2: Chapman and Martin   South Col camp   Sunday

Sentence 3: South Col   last camp   before the peak

Compare your sentences with the texts. Write some more key words for other students.

6.3 *Play a game!* Your own news stories

Play a game and write your own news story. Choose one of these titles and write the first sentence of the story.

FIRST HOLIDAY TRIP TO THE MOON
New mountain tribe discovered
SCIENTISTS TALK TO TREES

Pass your paper to the person on your left. Write the next sentence of the news story and pass the paper on. Do this five times. Then, read out the story to the rest of the class!

7 *Decide...*

Choose an exercise.

7.1 Make your own TV news programme

Work in pairs or in a small group. You are a news team. You have to prepare the news for tonight's TV news broadcast. The programme is five minutes long.

Read the texts again. They are some of the main stories for the day. Decide which ones you will use. You can also use some stories from Ex. 2.1. When you are ready, present your news programme to the class.

7.2 Decide!

Decide what you want to do and ask your teacher. You could:

— design a news programme for young people.
— prepare a news report about events in your school.
— prepare an interview with another student about a lucky experience.
— prepare a news report on a world event.
— write an exercise.
— write a dialogue.
— make a puzzle.
— make a test.
— write some questions.

Supplementary Exercises

1 *Vocabulary* What's the word?

1.1 Odd one out

One word in each line is different from the other words. Which one? Give a reason. For example:

(1) reporter (investigate) journalist

'Investigate' is different because 'reporter' and 'journalist' are people.

(2) report channel story

....

(3) altitude top peak

....

(4) swimming football economics

....

(5) crime science serious

....

(6) letter envelope questionnaire

....

(7) sickness injury recovery

....

(8) tragic sharp sad

....

(9) order sequence teenager

....

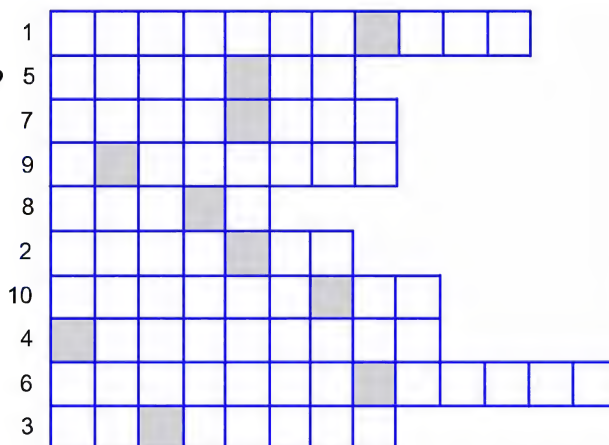
(10) programme advertisement poster

....

1.2 A puzzle

Write your answers from S. Ex. 1.1 in the correct space in the puzzle. (Be careful with the numbers!)

Can you make a word with the letters in the squares like this: ☐?

Clue: Political stories about the .... usually come first on the news.

1.3 Your puzzle

Make an ‘odd one out’ puzzle like this for your class.

2 *Reading* Can you believe the news?

2.1 What do they say?

These students are talking about the news. Which students say that you can believe the news? Which students say that you can’t?

Write the letters in two columns.

2.2 What do you think?

What do you think about the news? Ask your friends and family what they think and write a few sentences.

3 *Practice* Question tags

3.1 Match the question tag

Join the two parts of the sentence.

(1) She isn't in Class 5, ... a. ... isn't there?
(2) All the students in this class have finished Book 2, ... b. ... wasn't it?
(3) There's still a war in Africa, ... c. ... isn't it?
(4) That was a terrible air crash, ... d. ... wasn't he?
(5) Teachers should wear a uniform, too, ... e. ... haven't they?
(6) The scientist who discovered penicillin was Scottish, ... f. ... shouldn't they?
(7) It's too hot to work today, ... g. ... is she?

Listen and check your answers.

3.2 Checking or asking?

Listen to the sentences again. Are the speakers checking something or are they sure? Write 'C' and draw an arrow like this ↗ or 'S' and draw an arrow like this ↘ .

4 *Writing and speaking* Talk to Maggi

Write your answers to Maggi's questions. Then talk to her on the cassette.

MAGGI: Hi! What's happening in your part of the world this week?
YOU: ....
MAGGI: I like listening to the news. What's the most amazing news story you have ever heard?
YOU: ....
MAGGI: Oh! Last month I heard that scientists think there was life on Mars. What do you think about that?
YOU: ....
MAGGI: I like the news stories about discoveries – when they find old dinosaur bones or go inside a pyramid, for example. What kind of news stories do you like best?
YOU: ....
MAGGI: Oh, do you? I like knowing about famous people too. Do you like those stories?
YOU: ....
MAGGI: I think I'd like to be a news reporter. What kind of job do you want to do?
YOU: ....
MAGGI: Oh! I've got to go now. It was nice talking to you. Bye!
YOU: ....

Unit 18 Messages through space

Topic and language

1 Reading and discussion — The popularity of television

In our country everybody enjoys watching TV.

Work alone and answer the questionnaire.

Compare your answers with other students in your class.

Questionnaire

(1) Is there a TV in your home? Yes/No
(2) Is it colour or black and white?
(3) Where is it in your house?
(4) Do you watch TV every day? Yes/No
(5) How many hours of TV do you watch every week?
(6) What are your favourite programmes?
(7) Do you like to watch quizzes on TV? Yes/No

2 Reading and vocabulary — Satellites in the sky

2.1 What don't you know?

Have you ever seen a satellite in the sky?

Tell the class what you saw.

What do you know about satellites? What don't you know? Work with a partner and make a list.

Satellites

Things I know	Things I don't know
They send TV pictures.	How big are satellites?

Compare your lists with the rest of the class.

2.2 Guess!

Here are some facts and figures about satellites. What do you think they mean?

(1) 300 000 kilometres per second
the speed radio and television signals travel

(2) 35 880 kilometres above the equator

(3) 11 000 kilometres an hour

(4) 10—12 years

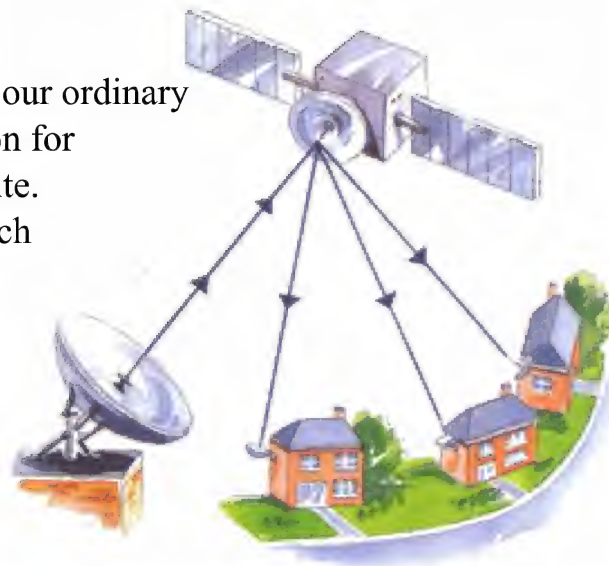
2.3 Find some answers

Now read about satellites and check your answers to Ex. 2.2.
How many questions from Ex. 2.1 can you answer now?

Satellites

Satellites in our lives

Satellites are an important part of our ordinary lives. For example, the information for weather forecasts is sent by satellite. Some satellites have cameras which take photographs of the Earth to show how clouds are moving. Satellites are also used to connect our international phone calls.

Computer connections of the World Wide Web and Internet also use satellites. Many of our TV programmes come to us through satellites. Aeroplane pilots also sometimes use a satellite to help them find their exact location.

Television satellites

We use satellites to send television pictures from one part of the world to another. They are usually 35 880 kilometres above the equator. Sometimes we can see a satellite in the sky and it seems to stay in the same place. This is because it is moving around the world at 11 000 kilometres an hour – exactly the same speed that the Earth rotates. A satellite must orbit the Earth with its antennae facing the Earth. Sometimes, it moves away from its orbit, so there are little rockets on it which are used to put the satellite back in the right position. This usually happens about every five or six days.

The Earth's biggest dustbin?

Space is not empty! Every week, more and more satellites are sent into space to orbit the Earth. A satellite usually works for about 10－12 years. Satellites which are broken are sometimes repaired by astronauts or sometimes they are brought back to the Earth to be repaired. Often, very old or broken satellites are left in space to orbit the Earth for a very long time. This is very serious because some satellites use nuclear power and they can crash into each other.

2.4 New words

Here are some words from the texts. Can you put them into pairs with similar meanings?

power   orbit   position   move around   send   energy   place
about   transmit   approximately

Now put one of the words into each sentence.

(1) Every day, more satellites .... the Earth.
(2) TV stations .... signals to the satellites.
(3) .... 200 million people watched the Olympic Games at the same time on television.
(4) Each satellite has a different .... in space.
(5) Satellites use batteries and solar ....

3 *Say it clearly!* Intonation of questions

Practise your intonation with question forms.

Do you watch TV every day?

How many hours of TV do you watch?

3.1 Sometimes questions go up ...

When we ask questions in English our voice can go up or down at the end. Our voice goes up when we ask a 'yes/no' question.

Listen and say the questions.

A: Do you watch TV every day?
B: Yes, I do!

A: Do you like football?
B: No, I hate it!

A: Have you seen this video before?
B: Yes, I saw it last week.

A: Did you go to the cinema last night?
B: No, I didn't. I stayed at home.

3.2 ... and sometimes questions go down

Our voice goes down when we ask an 'information question' (Where? What? How? Why? When? How long?).

Listen and say the sentences.

I like your skates. Where did you buy them?

I went to the cinema last night. What did you do?

That's a brilliant model. When did you make it?

Why don't you eat meat?

3.3 Up or down?

Read these questions. Draw an arrow like this ↗ or like this ↘ next to each one.

Do you live near school?
Where do you live?
Why don't you catch the bus?
Do you walk to school?
What's your favourite group?
Do you like folk music?
When did you go to China?
Have you been to Wonsan?
What do you usually do on Sundays?
Do you want to go swimming on Saturday?
What class are you in?

Listen and check your answers. The UP questions come first on the cassette.

4 *Language focus* The passive

4.1 Active or passive?

Look at these sentences. What differences can you see between the sentences in List A and the sentences in List B? Tell the class your ideas.

List A

They send more satellites into space every year.
We use satellites in many different ways.
They use satellites to broadcast television signals.
We often make telephone calls via satellites.
Pilots sometimes need satellites for navigation.

List B

Every year more satellites are sent into space.
Satellites are used in many different ways.
Satellites are used to broadcast television signals.
Telephone calls are often made via satellites.
Sometimes satellites are needed for navigation.

How do you say the sentences in List B in Korean?

4.2 When do we use the passive?

The sentences in List B are examples of the passive voice. The passive is often used in English when:

a. the action is more important than who does it.

Millions of letters are posted every day.

b. you describe a process.

Signals are transmitted to satellite. They are then sent to another country.

c. you write a rule.

Ball games are not allowed here.

Read these passive sentences. Write ***a***, ***b***, or ***c*** next to each one.

(1) The TV cameras are put into position.
(2) Cider and orange juice are provided for the news team.
(3) The studio staff are asked to be quiet.
(4) The director says, ‘No visitors are allowed now!’
(5) In the TV studio, pictures and sound are recorded on the camera. They are then sent across the world.

4.3 How to form the passive

Look at the passive sentences in Exercises 4.1 and 4.2. You can find the same verb in every passive sentence. What is it?

subject + ? + past participle

Look at the sentences again. Why is the verb sometimes singular and sometimes plural?

You saw some past participles in Unit 5.

4.4 *Practice* In the park

Write the correct form of the verb 'be' in the gaps.

INFORMATION

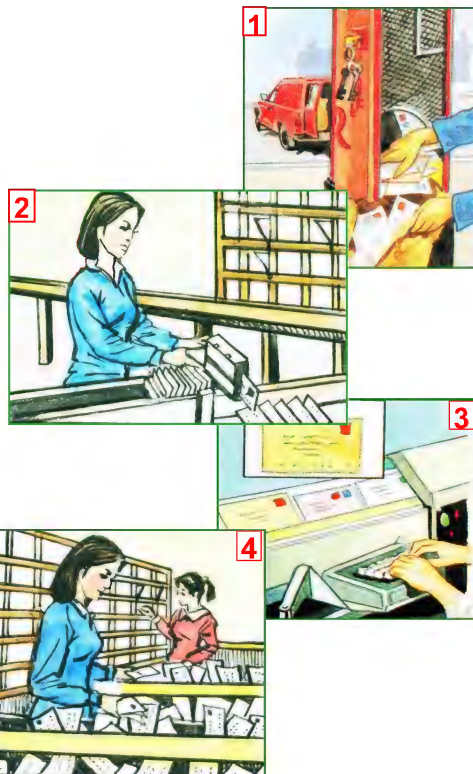
1. The park gates ..... opened at 10.00 a.m. They .... closed at 5.00 p.m.
2. The guests ..... asked to leave before 4.30 p.m.
3. The swimming pool ..... cleaned between 10.00 a.m. and 10.30 a.m. Please do not use it then.
4. Children under 12 years ..... not allowed in the swimming pool without an adult.
5. Fresh milk ..... sold in the park shop every day.

4.5 Letters around the world

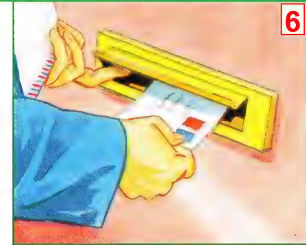
Read about how letters are delivered.
Use the passive to describe the sequence.

a. Letters ....(collect) from the post box. They ....(take) to the main post office.

b. A machine ....(use) to separate the letters into 'first class' and 'second class'.

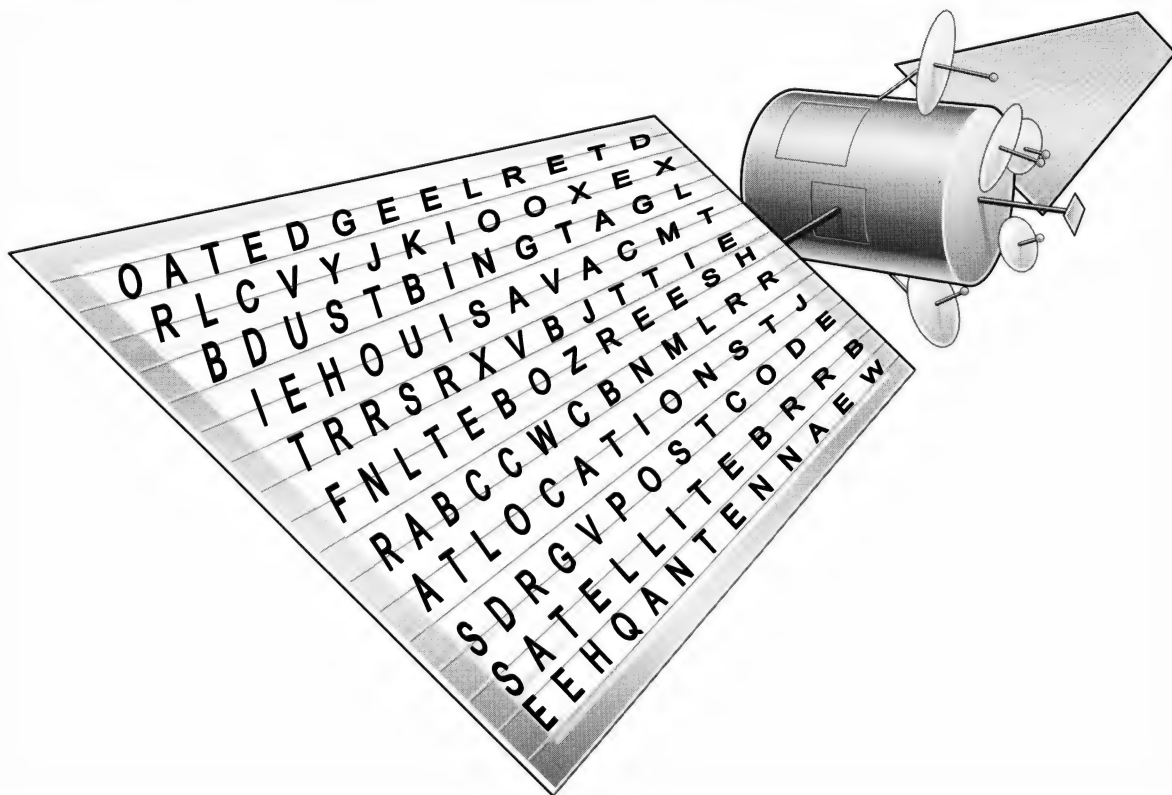
c. The letters ....(send) to the coding machine. Here the postcode ....(type) into a computer. Small blue dots ....(print) on each envelope.

d. The letters for different countries ....(put) into different post bags.

e. The bags ....(transport) by land, sea and air.

f. The letters ....(deliver) a few days later!

Supplementary Exercises

1 *Vocabulary* Definitions

1.1 Definition puzzle

Read the definition and find the word in the puzzle.

n. = noun *v.* = verb *adj.* = adjective *pl.* = plural

(1) *n.* a machine put in orbit around the Earth:
s.........................

(2) *n.* a place where we put household rubbish:
d........................

(3) *n.pl.* aerials on a satellite:
a.........................

(4) *n.* some letters or numbers in a postal address:
p........................

(5) *v.* and *n.* to move round the Earth in a fixed path:
o........................

(6) *v.* to turn on an axis:
r.........................

(7) *adj.* precise, correct:
e........................

(8) *n.* a position or place:
l..........................

1.2 Example sentences

Complete these example sentences with one of the words from the puzzle.

(1) If you put the .... with the address on an envelope, the letter will arrive quicker.

(2) Some families now have four .... in different colours: one for paper, one for tins, one for glass and one for rubbish.

(3) Satellites are like insects: they have .... to pick up sound waves.

(4) Satellites continue to .... the Earth after they have broken down.

(5) The Earth .... on its axis every 23 hours, 56 minutes and 4 seconds.

(6) .... are used for many modern means of communication such as radio and cellular phones.

(7) No one knows the .... number of satellites in space.

(8) Communications satellites have a fixed .... in space.

2 *Present passive* Rules, processes and actions

2.1 Types of sentences

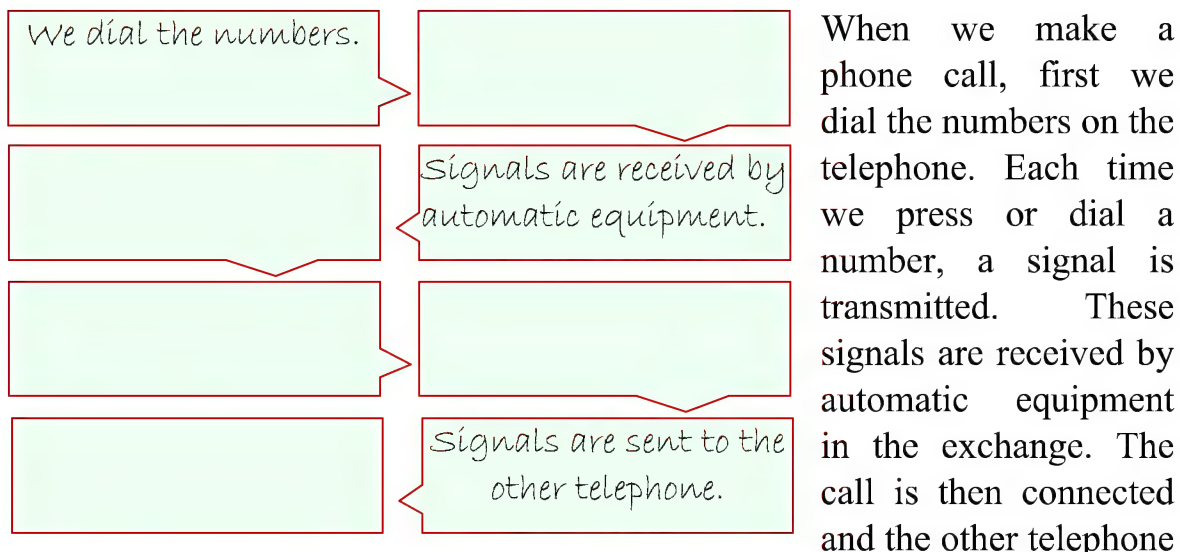
In this Unit you saw that the passive is often used in English when:

- ***a.*** the action is more important than who does it.
- ***b.*** you describe a process.
- ***c.*** you write a rule.

Read these sentences and write ***a, b*** or ***c*** beside each one.

(1) More satellites are sent into orbit every day.
(2) Personal stereos are forbidden in the classroom.
(3) First, the small trees are cleared and then the bigger trees are cut down.
(4) Radio waves are transmitted into space and then 'reflected' by satellites.
(5) Portuguese is spoken in Brazil.
(6) No food or drink is allowed in the museum.
(7) Skating is forbidden in the park.

2.2 A telephone call

Read about the different stages in a telephone call and fill in the flow chart.

When we make a phone call, first we dial the numbers on the telephone. Each time we press or dial a number, a signal is transmitted. These signals are received by automatic equipment in the exchange. The call is then connected and the other telephone starts to ring. When you speak into the telephone, the sound of your voice is changed into electrical signals by the microphone inside. These signals are sent to the telephone at the other end. There they are changed back into sound by the receiver.

2.3 How do mobile phones work?

Look at the flow chart and describe the process.

There is a small transmitter and receiver in a mobile phone. When we make a call with a mobile phone, ...

1 Signals are transmitted from the mobile phone.

2 Signals are received by local receiving equipment in a 'cell'.

3 If we move, the signals are transferred to the next 'cell' by a computer.

4 Signals are sent from the cell to the telephone network.

5 Signals are transmitted to the other telephone.

3 *Writing and speaking* Talk to Lewis

Write your answers to Lewis' questions. Then talk to him on the cassette.

LEWIS: Hi! We're doing a survey at school about television and radio. Can you help me?
YOU: ....
LEWIS: Thanks! My first question is: what kinds of programmes do you listen to on the radio?
YOU: ....
LEWIS: OK. Thanks. Next, when you listen to music, is it on the radio, on a cassette, on a CD or on a record?
YOU: ....
LEWIS: Mmm. I like cassettes because I share them with my friends and CDs are quite expensive. Now then, television. What kinds of TV programmes do you like best?
YOU: ....
LEWIS: Oh, do you? How often do you watch TV?
YOU: ....
LEWIS: Thanks. My next question is: have you got a radio, a TV, a video, cassette or CD player in your bedroom?
YOU: ....
LEWIS: I've got a cassette player and radio in my bedroom. I listen to music when I'm doing my homework. Do you listen to music then?
YOU: ....
LEWIS: Well, thanks for answering my questions. Talk to you soon! Bye!
YOU: ....

Unit 19 News broadcast

Culture matters

1 *Discussion* News broadcast in our country

The Central Broadcasting Committee of Korea is famous all over the world for the quality of its programmes.

When did the first radio news broadcast start in our country? Do you know when the black and white TV and colour TV broadcast began in our country?

What do you think this symbol on the Korean Central TV channel means?

2 *Reading* The BBC

2.1 Read quickly ...

Read the text about the BBC very quickly. What are these numbers about?

1 700   214   19 million   35%

2.2 In or out?

Read the text slowly. Which of these ideas are in the text? Write I (in the text) or NI (not in the text) for each one.

(1) British people have to pay to own a television.
(2) There are many new inventions in the world of television.
(3) Most foreign journalists are men.
(4) Thirty-five per cent of the BBC's news programmes are on the radio.
(5) There are more than 200 hours of BBC radio and television news programmes every week.

2.3 The words in the text

Find the words in Italic in the text.
Which other word has a similar meaning – ***a***, ***b*** or ***c***?

roughly	***a*** about	***b*** heavily	***c*** quickly
operation	***a*** organization	***b*** medicine	***c*** job
produce	***a*** sell	***b*** make	***c*** record

You can listen to the text on the cassette.

The BBC news service

Many people think that the BBC news programmes are better than those on other channels because the BBC is not a commercial company. But it's not true. It pays for its programmes from the television licence money which everyone must pay if they have a television. The television licence money exceeds the expenditure they use for its programmes.

The BBC, which is often known as 'Auntie', is the big news collecting operation. It has the world's large network of foreign correspondents. Ten per cent of the BBC's annual budget is spent on news collecting, reporting and presenting. More than 1 700 people work for the BBC news service.

The BBC produces more than 214 hours of news and current affairs programmes for radio and television each week. In the UK, roughly 19 million people – almost 35% of the total population – watch the BBC television news programmes every day.

Developments in technology are improving news collection and presentation every year. The BBC now uses special robotic cameras in the TV news studios to film the news presenters, and captions – the words and sentences at the bottom of the screen – are now produced automatically by computer.

3 *Listening* In the front line

3.1 The work of a foreign correspondent

Many of the BBC's foreign correspondents have a very difficult and dangerous job.
Can you join the two halves of these sentences together?

(1) They often report from war zones so ...
(2) The BBC teaches them first aid so ...
(3) The BBC gives them protective clothes such as ...
(4) They have portable satellite equipment so ...
(5) If it is dangerous, they travel in ...

a. ... they know which medication to use.
b. ... helmets and special battle jackets.
c. ... armoured vehicles, which carry the cameras and satellite equipment.
d. ... they have to be very careful.
e. ... they can report from anywhere in the world.

3.2 Barbara Wallis, foreign correspondent

Barbara Wallis is a foreign correspondent for the BBC. Listen. She is talking about her work.

Check your answers to Ex. 3.1.

4 *Decide...* Across cultures

Choose an exercise.

4.1 Talk to a foreign journalist!

Work in pairs. One of you is yourself. The other is a foreign journalist on an exciting trip to our country.

First, decide where you are – on TV, in the street, at your school, in your house. If you are the journalist, imagine where you have been and make some notes. If you are the other person, prepare some questions about the trip. For example, about sightseeing, the food, the weather, what happened, etc.

When you are ready, talk to each other!

4.2 Write something about a correspondent!

What kind of person can be a correspondent? Say what the job is and what characteristics the person must have.

Supplementary Exercises

Ways to reading (2): skimming

You can see some more techniques to help with reading. You can use these techniques when you are reading in English or in Korean.

1 Make reading easier!

1.1 First and last paragraphs

When you read a long text, you often don't have to read all of it. Sometimes you just want to find out the main ideas. You can make reading easier if you do this:

a. Read the title first
b. Read the first and last paragraphs
c. Read the headings

Now think! What will the text say?

Try with this text.

HOW CAN WE LOOK AFTER THE PAST?

Children and grandchildren in the world may not have a chance to visit many of the most famous places around the world. War, weather, age, traffic and pollution damage these famous places. There is a need for constant renovation. But looking after these places often costs more than one country can afford.

The World Heritage Organization

Vandalism: one of the biggest problems

Other experts say that the best solution is education. If people learned to respect history, they would not destroy or damage it. They would also want to spend money to look after old places. For this reason, The World Heritage Organization helps to spread information about the value of historic sites.

Which of these sentences do you think are in the missing text? Write 'P' (probably) or 'DN' (definitely not) next to each sentence.

(1) Countries around the world united to form The World Heritage Organization in 1972.
(2) There are too many cars.
(3) There are many different ideas about how to solve the problem of vandalism.
(4) There is no point in repairing old buildings.
(5) Children like playing with their grandparents.
(6) At some sites, governments have built high fences to protect the site from vandals.

Now check your answers. Look at the Additional materials on pages 158 – 159.

1.2 Try again!

Look at Unit 18.

Look at the text about the satellites and do this:

a. Read the titles.
b. Look at the picture.
c. Read 'Satellites in our lives' from the beginning to the end.

Now write down what other information you think will be in the text. Read the text and check your ideas!

Now read the text about the television satellites from 'We use satellites to' to 'six days'. Can you guess what other information is in the text?

2 Make reading easier! First and last sentences

2.1 The main idea

Sometimes we can get the main idea by reading the first two sentences or the last two sentences. Read these sentences.

'I HAVE FOUND IT'

One day the King of Syracuse called Archimedes to him. 'Look at this crown. Is it made of gold or different metals?'

Now Archimedes,

'There is the answer to your question. Your crown is not completely made of gold. There is silver in it also.'

Since then his discovery has been well known to everybody as the 'Archimedean Principle.'

Do you think the following information is in the complete paragraph? Put a tick (√) if you think 'Yes' and put a cross (×) if you think 'No'.

(1) more information about what Archimedes discovered
(2) more information about the life of King of Syracuse
(3) information about Archimedes' bath
(4) information about the discovery of Italian, mathematician and physicist
(5) information about life in 1871

Now check in the Additional materials on pages 158－159.

2.2 Try again!

Read these sentences and write down what you think is in the rest of each paragraph. Then check in the Additional materials on pages 158－159.

THOMAS EDISON

When he was a boy, Edison liked to ask a lot of questions. His teacher didn't understand him. ____ ____ He invented more than thousand things such as a transmitter, a gramophone, a glow lamp, a movie camera and so on. He was a great inventor.

Additional materials

HOW CAN WE LOOK AFTER THE PAST?

Children and grandchildren in the world may not have a chance to visit many of the most famous places around the world. War, weather, age, traffic and pollution damage these famous places. There is a need for constant renovation. But looking after these places often costs more than one country can afford.

The World Heritage Organization

In the early 1970s, world governments decided that if they joined together, they would be able to preserve their history. If every country paid some money, they said, it would be possible to look after important historic places. Also, if they discovered that a monument needed urgent help, they would have money for repairs. For these reasons, countries around the world united to form The World Heritage Organization in 1972. Today, the organization helps to maintain and restore the most important places from our history.

Vandalism: one of the biggest problems

However, one of the biggest problems for historic places is vandalism. People sometimes enter the sites and destroy or damage the buildings. At some sites governments have built high fences to protect the site from vandals.

There are many different ideas about how to solve the problem of vandalism. Some experts say that if guards patrolled the sites, vandals would not be able to get in. Other experts say that if they installed more television cameras, they

would not need so many security guards. At other sites, there are not enough guides, and visitors can walk around alone. If every site had more guides it would be easier to look after these famous places.

Other experts say that the best solution is education. If people learned to respect history, they would not destroy or damage it. They would also want to spend money to look after old places. For this reason, The World Heritage Organization helps to spread information about the value of historic sites.

'I HAVE FOUND IT'

One day the King of Syracuse called Archimedes to him. 'Look at this crown. Is it made of gold or different metals?'

Now Archimedes, thinking about the question, happened to go out for a bath. When he stepped into the bath, he saw water rise higher in the tub. Then he suddenly sprang out of the water, and rushed home through the streets, crying, 'I have found it!'

He made a few short experiments in his house, then he went straight to the King. He put some gold and silver on the table, beside two pots. Archimedes said, 'We shall put the crown in the pot. If it is completely made of gold, the water will reach the first mark. If it is made of silver, the water will reach the second mark.'

They watched, and the water came between the two marks. 'There!' cried Archimedes. 'There is the answer to your question. Your crown is not completely made of gold. There is silver in it also.'

Since then his discovery has been well known to everybody as the 'Archimedean Principle.'

THOMAS EDISON

When he was a boy, Edison liked to ask a lot of questions. His teacher didn't understand him. He wanted to send him away from school. So his mother brought him home and taught him herself.

Edison was interested in science. He grew vegetable in his garden and sold them. With the money he built a science lab for himself. He invented more than thousand things such as a transmitter, a gramophone, a glow lamp, a movie camera and so on. He was a great inventor.

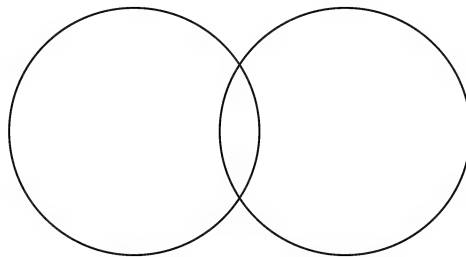
Unit 20 Revision and test
(Units 17–19)

Revision

1 *Vocabulary* The words you met

1.1 Verb, noun or both?

Here are some of the words you saw in Units 17－19. Some words are nouns, some are verbs and some are both. Write them in the right place in the diagram.

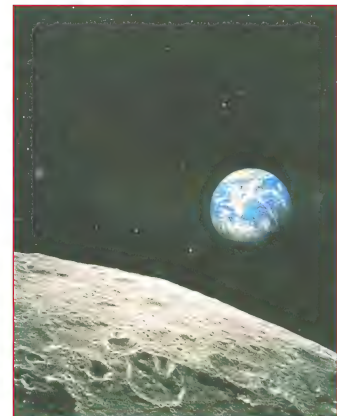
satellite weather forecast signal location dustbin
antenna transmit orbit crash rotate provide allow
transport deliver

Compare circles with other students in your class.

1.2 The moon: a natural satellite

Read about the moon. Choose a word from Ex. 1.1 to complete the sentences. Put the word in the correct form.

Look back at the text. Write N (noun) or V (verb) over each word that you wrote in the gaps.

A natural satellite

The moon is a natural satellite which .... around the Earth. Normally, we only see one side of the moon because the moon .... at the same speed as the Earth. In 1969, a rocket went to the moon. It .... pictures of the moon back to the Earth. From the pictures we could see that the moon has deep valleys.

These valleys were made when meteors .... into the moon.

The climate on the moon is terrible. There isn't any air on the moon, so the difference between daytime and nighttime temperatures is enormous. An imaginary .... for the moon would say, 'The temperature today will be 130 degrees centigrade. At night, it will drop to minus 173 degrees centigrade!' The average difference in day and night temperatures on the moon is 300 degrees centigrade.

1.3 Word pairs: adjective and noun

Choose the noun which we use most often with the adjective.

(1) tragic	***a*** broadcast	***b*** advertisement	***c*** producer	***d*** accident
(2) balanced	***a*** gossip	***b*** report	***c*** politician	***d*** crime
(3) ordinary	***a*** dinosaur	***b*** smoke	***c*** people	***d*** president
(4) foreign	***a*** altitude	***b*** home	***c*** news	***d*** coincidence
(5) surprising	***a*** channel	***b*** economics	***c*** coincidence	***d*** antenna

Write the correct word pair in each sentence.

(1) Many people are more interested in home news than in ....
(2) When twins meet after many years, there are often many .... in their lives.
(3) The young journalist was killed in a .... in Albania.
(4) The BBC tries to present .... on the news.
(5) Human interest stories are often about ....

2 *Question tags* What shall we watch?

2.1 The week on TV

Chol Ho and Yong Min are talking about the TV programmes they are going to watch in the next few days. Choose the correct question tags from the box.

aren't we?	don't you?	have you?	haven't we?
isn't it?	isn't it?	shall we?	shall we?

CHOL HO: Look, Yong Min. Look what's on on Saturday. That's the programme you like about animals, [1]........?
It's before dinner. Let's watch that together, [2]........?

YONG MIN: OK. You want to watch that space film at 7 o'clock, [3]........?

CHOL HO: No, we can't. We're going to Grandma's after dinner on Saturday, [4]........?

YONG MIN: Oh, yes, that's right.

CHOL HO: Let's look at Sunday. You haven't seen the new children's story yet, [5]........?

YONG MIN: No, I haven't. We'll watch that then at 7.30.

CHOL HO: Now, Monday, there's my sports programme. Great! Let's watch this film at 6.30, [6]........? It looks interesting.

YONG MIN: What's it about?

CHOL HO: Um ... it says 'an exciting adventure'.

YONG MIN: We've seen it already, [7]........?

CHOL HO: Oh, yes. I remember. It's very boring, [8]........?

2.2 What can you say?

What can you say in each of these situations? Write a sentence for each one and use question tags.

(1) You think the bus leaves at 10 a.m.
The bus leaves at 10 a.m., doesn't it?

(2) You think the new song is nice.

(3) You think the History homework was on page 45.

(4) You think your friend's new phone number is 955—4573.

(5) You think the new Maths teacher is very nice.

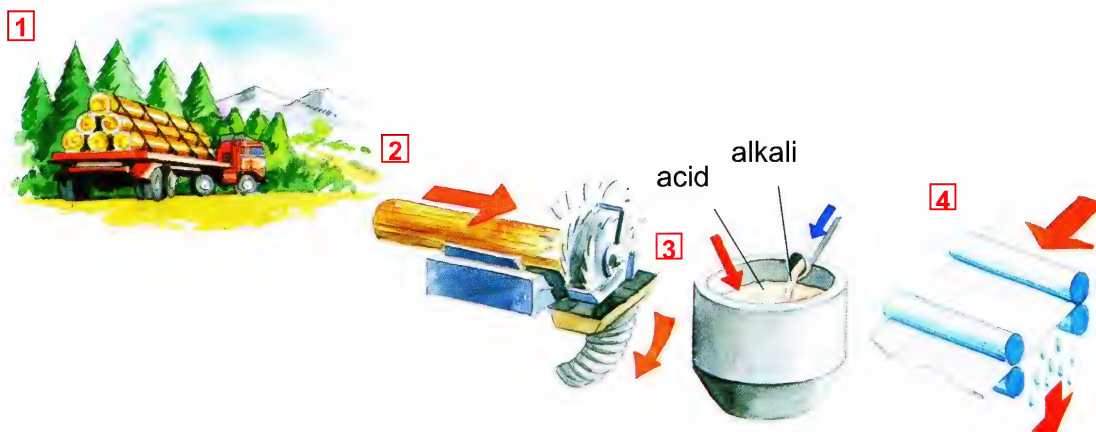
(6) You think you have already seen the new film at the cinema.

(7) You think you have to do the English homework for tomorrow.

3 *Present passive* How do they do that?

3.1 Making paper

Can you match the two parts of the sentence to explain how paper is made?

(1) The trees	***a.*** is cut into very small pieces.
(2) The logs	***b.*** are taken to paper mills.
(3) Each log	***c.*** are mixed with acid.
(4) The small pieces of wood	***d.*** are cut into logs.
(5) Alkali	***e.*** is then heated.
(6) This mixture	***f.*** are added.
(7) Water and dye	***g.*** is added.
(8) The paper mixture (pulp)	***h.*** is pressed between rollers to remove the water.

3.2 Making glass bottles

Look at the pictures which show how we make glass bottles. Use the Present passive to describe the sequence.

1 All glass *is made* (make) from sand. Many old glass bottles ....(recycle) and ....(melt).

2 Sodium carbonate .... (add) to reduce the melting point of the sand. Calcium carbonate ....(mix) with the other raw materials to make the glass waterproof. The sand, old bottles and the chemicals ....(put) into the furnace. The furnace ....(heat) to 1 400 degrees centigrade so that the sand melts.

3 A small amount of melted glass ....(drop) into the mould. Air ....(force) into the mould to shape the glass.

4 The finished bottles ......(take out) of the mould.

3.3 How do you use the passive voice?

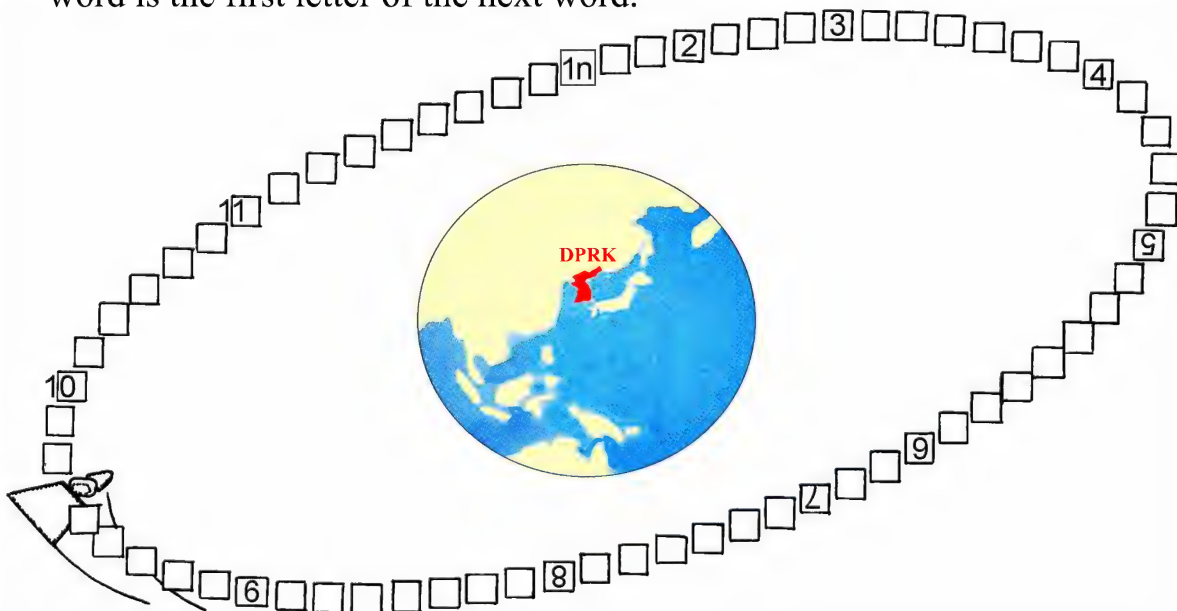
Are these sentences true or false? Write 'T' or 'F'.

(1) You use the Present passive when the person is more important than the action.
(2) To form the Present passive, you use the verb 'be' and a past participle.
(3) We often use the Present passive to describe a process.
(4) This is a correct Present passive sentence:
Thousands of pictures are drawn for one short cartoon film.

Find some examples in Exercises 3.1 and 3.2 to prove your answers. Now check in Unit 18 and in the *Grammar summary*.

Test yourself

1 *Vocabulary* Orbit puzzle

Read the clues and write the words in the puzzle. The last letter of the first word is the first letter of the next word.

(1) These programmes are usually on the radio every hour.
(2) Football, swimming and table tennis are all types of ....
(3) Somebody aged 13 –19 is a ....
(4) A journalist writes a .... for a newspaper.
(5) To move something from one place to another.

(6) When two people are in a race, the referee has to .... them to see who is the fastest.
(7) You need one if you want to send a letter.
(8) A school subject about money, banks and trade
(9) A machine that helps us to send messages to the other side of the world
(10) Part of something, for example a short part from a story
(11) A machine that people watch a lot!

2 *Question tags* **What can you say?**

Write sentences with question tags for these situations. Show if your voice goes up or down.

(1) You're not sure if there is a Maths exam on Thursday. You ask someone.
There's a Maths exam on Thursday, isn't there?
(2) You think the new History teacher is very nice.
....
(3) You suggest to your friend that you can play handball this afternoon.
....
(4) You are almost certain that Mt. Kilimanjaro is in Kenya.
You ask your teacher.
....
(5) You don't think your friend has seen the feature film *'Don't Wait for Us'.* Check.
....
(6) You are not sure how much a cinema ticket costs. You think it costs 10 *won*, so you ask your friend.
....

3 *Present passive* **How do they develop photographs?**

Read about how they develop photographs. Can you complete the sentences with the correct phrase?

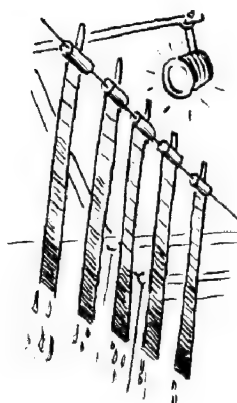
are done   is done   is dried   is inserted   is put   is placed   is put
is removed   is washed   is washed and dried

Listen and check your answers.

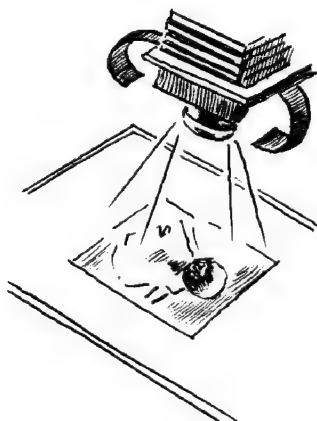
DEVELOPING and PRINTING PHOTOGRAPHS

There are two main steps in producing photographs: developing and printing. Each step [1]....................... in a dark place .

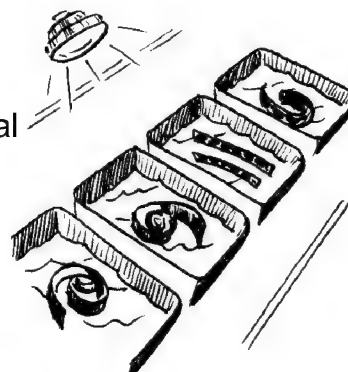
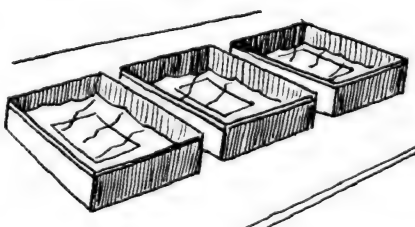
1) Developing the negatives

First, the film [2].................... from its case.

Next, it [3]...................... into different chemicals. These develop it, 'stop it' and 'fix it' so that the image does not change.

After that, it [4]............ in clean water. Then, it [5]............... in a warm place.

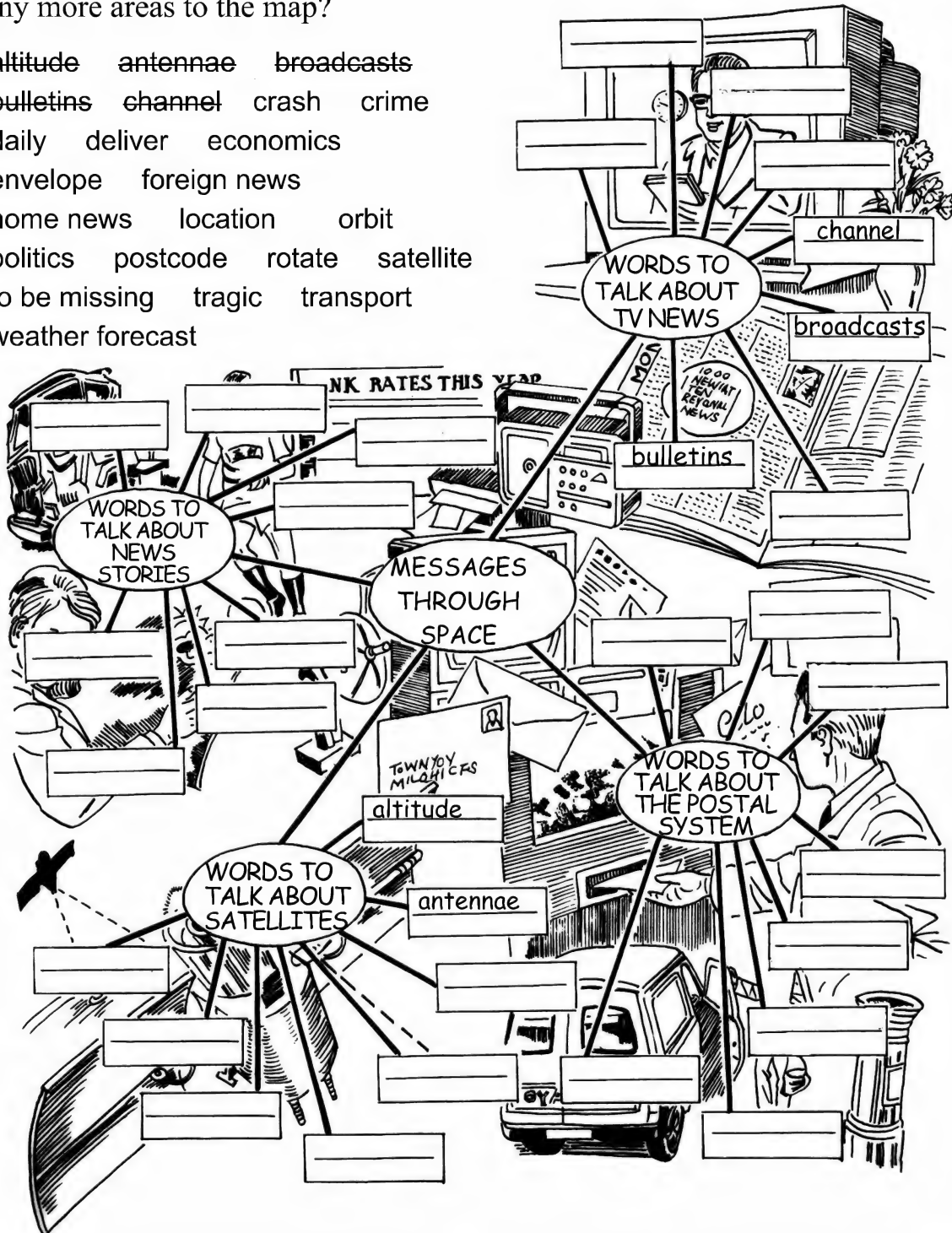
2) Printing the photographs

To make a print, the negative [6].................... in an 'enlarger'.

This projects the image at special photographic paper.

Then, the photographic paper [7].................... into chemicals to develop it and fix it. Finally, it [8].................. .

In photographic laboratories, this process is done in big machines.
Film [9]..................... at one end, and prints come out at the other end. Developing, fixing, washing and drying [10]................. automatically inside the machine.

A vocabulary map (5)

MESSAGES THROUGH SPACE

Write these words in the correct area of the vocabulary map. (Some words can go in two or more areas.) You can also add the meanings in Korean (in the bottom half of each box). Can you add any more words that you know or any more areas to the map?

~~altitude~~ ~~antennae~~ ~~broadcasts~~
~~bulletins~~ ~~channel~~ crash crime
daily deliver economics
envelope foreign news
home news location orbit
politics postcode rotate satellite
to be missing tragic transport
weather forecast

Unit 21 General revision

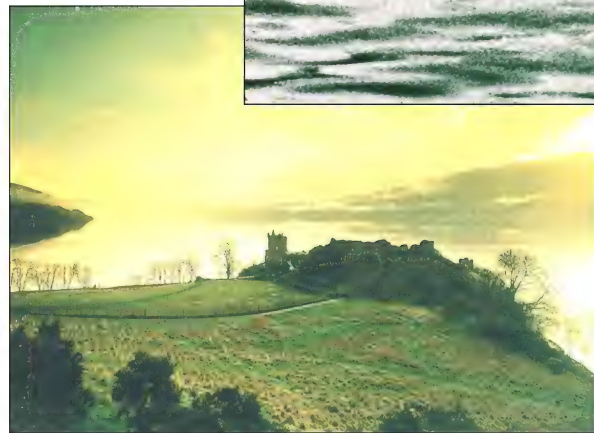
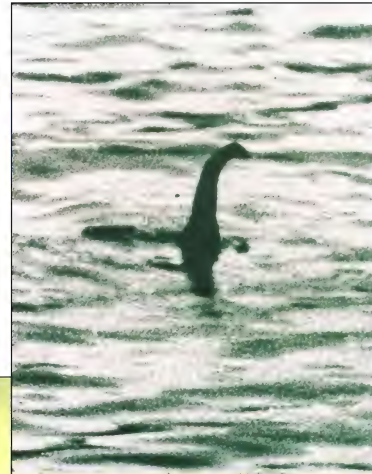
Exploration and mystery

1 *Past simple, Past continuous* **Is there a monster in Loch Ness?**

Read about the Loch Ness monster. Circle the correct answer.

(1)	***a.*** were driving	***b.*** drive	***c.*** are driving
(2)	***a.*** was using	***b.*** used	***c.*** uses
(3)	***a.*** was swimming	***b.*** swims	***c.*** is swimming

The 'monster' in Loch Ness, Scotland, is one of the world's best-known mysteries

In 1933, a man and a woman said that they saw 'an enormous animal' in the water while they [1]............... beside the lake. Since then many people have seen the monster and some people have taken photographs. In 1972 and 1975, a European scientific expedition [2]............... special cameras to search for the monster. They took photographs of a large animal while it [3]............... under water, but many people said the photographs were not clear enough. In 1987, a British expedition searched the lake with sonar equipment but they found nothing.

2 *Social language* **A discussion**

Nikki and Pete are discussing the Loch Ness monster mystery. Circle the correct answer.

NIKKI: Pete, do you think the monster exists?

PETE: ***a.*** That's not the point.
b. I don't think so.
c. It's the principle that's important.

NIKKI: Well, look at this picture. You can see the monster here!

PETE: ***a.*** Do you really think that's a monster?

b. Do you really think it's a good idea?

c. Do you really like it?

NIKKI: Well, I think there's a monster there. I'd love to see it.

PETE: ***a.*** Why don't we go to Loch Ness and look for it?

b. Why is there a monster there?

c. Why should I?

NIKKI: Good idea! Let's go!

Alternatives for the future

3 *Present perfect* **Transport problems**

Read about attempts to reduce problems with car traffic. Circle the correct answer.

Many countries have tried different solutions to the problem of car traffic.

(1) Some cities .... to improve public transport systems. For example, in Pyongyang, underground trains are running to solve the traffic problem.

a. have tried ***b.*** try
c. were trying

(2) Some cities, for example, Mexico City, ... controls on the use of cars. Cars can only come into the city centre on certain days in the week.

a. have introduced ***b.*** introduce
c. were introducing

Puhung metro station

(3) A new development is Magnetic Levitation trains which travel at high speed without polluting the atmosphere. In some countries, they .... construction of a Maglev train.

a. have begun ***b.*** begin ***c.*** were beginning

4 *Future simple* Your predictions

One hundred years from now, how will we live? Choose three questions and write a sentence to answer each one.

How will we travel from place to place?
How will we communicate?
Where will we go in space?
What will we eat?
What will our houses look like?
Where will we work? What work will people do?
What will our cities look like?
What will the climate be like?

The world of music and film

5 *Past perfect* Before the concert began

Look at this picture of a concert. What had people done before the concert began?

Write four sentences.

(1) The engineers — test all the equipments

The engineers had tested all the equipments.

(2) The cleaners — clean the concert hall

(3) The ticket office — sell all the tickets

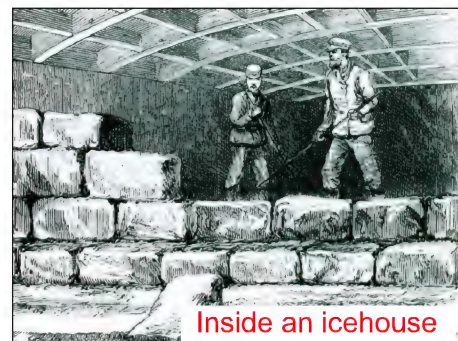
(4) The players — practise their instruments

Changing views

6 *'used to', relative clauses* Ice in summer

6.1 In Norway

Ice in summer is a very recent thing. What did they do hundreds of years ago? Read the text and circle the correct answers.

Inside an icehouse

(1) Hundreds of years ago, people .... electricity but they had ice in their drinks in summer.
   a. didn't use to have ***b.*** weren't using ***c.*** aren't using

(2) How ....
   a. did they use to get it? ***b.*** do they use it? ***c.*** do they get it?

(3) Workers used to sail in ships from England to Norway. There, they .... large blocks of ice from the lakes. They then took them back to England on the ships.
   a. used to cut ***b.*** were using ***c.*** were cutting

6.2 In England

Read what happened to the ice in England. Circle the correct answers.

(1) Rich people, ... lived in large houses, often had a separate 'icehouse' where they put the ice.
   a. who ***b.*** which

(2) The icehouse, ... was usually underground, was very cold. This meant that the ice melted very slowly.
   a. who ***b.*** which

(3) Ice was very expensive but it was very popular with rich people, ... used to put it in their drinks when it was hot.
   a. who ***b.*** which

From space to screen

7 *Present passive* A computer

Read about a computer. Put the verbs in the correct form of Present passive.

Computers are now much smaller and more powerful, and they can [1]........(buy) much more cheaply. Computers [2].........(use) in many fields – in business, science, medicine and education, for example. They can [3]........(use) to forecast the weather or to control robots which make cars. The computer's memory is the place where information [4].........(keep) and calculations [5].........(do). A computer cannot think for itself – it must [6].........(tell) exactly what to do. A lot of difficult calculations can [7].........(do) very quickly on a computer. And computers don't make mistakes. Some mistakes [8].........(make) by the programmers – the people who give the computer its instructions.

Extension

Exploration and mystery

1 *Past simple, Past continuous* A mysterious experience

Read about the experiences of the Knowles family in Australia. Put the verbs in the correct form, either Past simple or Past continuous.

In January

1988, Fay

Knowles and her three sons, Sean, Partrick and Wayne [1]..............(go) from Perth in southwest Australia to Melbourne to stay with relatives. At 4 o'clock one morning, they [2]............(drive) just west of a small town called Mundrabilla when they [3].............(see) some lights on the road ahead. While they [4]...............(look) at them, the lights suddenly [5]...........(disappear) and then [6].............(come) back again right above their car. 'That's not a car or a lorry,' said Sean. 'Those lights are in the sky, right over our car!'

Mrs Knowles [7].............(put) her hand out of the window and [8].............(touch) the roof of the car. 'There's something soft, like rubber, on the roof of the car,' she shouted. She [9]................(look) at her hands and [10].............(notice) that there was black dust on them.

Suddenly, as they [11]............(drive) along the road, the car [12]..............(start) to shake from side to side, and then something [13]...............(lift) it up into the air, off the ground. Mrs Knowles and the boys [14]............(start) crying. The car then [15].................(drop) to the ground again.

A lorry driver who [16].............(drive) behind them also [17].................(see) the bright light and [18]..............(telephone) the police in Ceduna. Many other people [19].................(say) that while they [20].............(travel) that night, the weather suddenly [21]................(change) and it became misty and windy. No one knows exactly what happened.

Alternatives for the future

2 *Present perfect* Controlling the traffic

2.1 In the cities

Read about ways of controlling traffic. Underline each example of the Present perfect ('have done'). How many can you find?

City Traffic

In recent years, serious traffic problems have developed in large cities in other countries. Many cities have experimented with different ideas for controlling the traffic. For example, in some places, they have established 'park and ride' systems, where people can park their cars and travel into the city by bus. Other cities have introduced a complete ban on certain cars on certain days of the week.

New technology has also made other solutions possible. In some cities, for example, they have placed automatic posts in the middle of roads into the city centre. These posts prevent cars from entering the city centre, but when taxis, buses and ambulances approach them, they automatically disappear into the ground.

Many city councils have also put computers and scanners on all roads into the city. Drivers have to buy a special electronic card and put it in their car. When the car has passed through a scanning machine, a computer checks the card and allows the car to go through. Drivers who have not remembered to put their card into their car cannot take their cars into the city.

2.2 Four solutions

Look back at the text. It mentions four ideas for controlling the traffic that some cities have tried. What are they?

1. Some cities have established ....
2. ....
3. ....
4. ....

2.3 Where you live

How has the state tried to control the traffic in your area? Write a few sentences.

3 *Future simple* **Life in the future?**

Do you agree with these ideas about the future? If you agree, add another idea. If you disagree, say why. For example:

In the future there won't be any schools. Everyone will learn from computers at home.

I disagree. There will always be schools. How will we play sports and meet other people if we don't go to school?

1. In the future, public transport will be introduced widely.

   ....

2. No one will eat any meat because it will be full of chemicals.

   ....

3. Doctors and scientists will be able to cure all illnesses. No one will be ill again.

   ....

4. There won't be any more wars in the future.

   ....

5. It will be impossible to swim in the sea because all the sea water will be too polluted.

   ....

6. People will only work for two or three days a week.

   ....

The world of music and film

4 *Past perfect* **Before the concert**

Look at the picture. These people went to a concert last night. What had they done before the concert began?

1. The group of women *had read the book*.
2. The group of musicians ....
3. The children ....
4. The family ....

Changing views

5 *'used to'* **The disappearing tiger**

Read about how tigers are disappearing.

All over the world, tigers are in danger of extinction. Today natural scientists say that they cannot find any tigers in Bali, the Caspian region or in Java. In south China, only about 30 tigers remain in four different areas – too far apart to meet and breed – and there are only four subspecies of tigers left in this area. India was once the home of many thousands of tigers – today there are only about 3 000 living here. Russia has lost many tigers, too. Only about 400 remain in Russia.

Now read these notes and write about how things were different in the past. Use 'used to'.

Things used to be very different in the past. For example, 100 years ago tigers used to ...

- 100 years ago: tigers lived all over Southern China, Caspian region, Siberia, Indochina, India, Indonesia, Bali
- hundreds of tigers in China and eight species
- In 1970, 1 800 tigers in India
- Russia, 1 000 tigers

From space to screen

6 *Present passive* **Practice**

Write the Present passive sentences from the words in brackets.

(1) (the classroom / clean / every day) ....
(2) (these rooms / clean / every day?) ....
(3) (glass / make / from sand) ....
(4) (stamps / sell / in a post office) ....
(5) (this room / not / use / very often) ....
(6) (we / allow / to park here?) ....
(7) (how / this word / pronounce?) ....

Irregular verbs

Infinitive	Past simple	Past participle	Infinitive	Past simple	Past participle
be	was, were	been	fly	flew	flown
become	became	become	forget	forgot	forgotten
begin	began	begun	forgive	forgave	forgiven
bite	bit	bitten	freeze	froze	frozen
blow	blew	blown	get	got	got
break	broke	broken	give	gave	given
bring	brought	brought	go	went	gone
build	built	built	grow	grew	grown
buy	bought	bought	hang	hung	hung
can	could	—	have	had	had
catch	caught	caught	hear	heard	heard
choose	chose	chosen	hide	hid	hidden
come	came	come	hit	hit	hit
cost	cost	cost	hold	held	held
cut	cut	cut	hurt	hurt	hurt
dig	dug	dug	keep	kept	kept
do	did	done	know	knew	known
draw	drew	drawn	lay	laid	laid
drink	drank	drunk	lead	led	led
drive	drove	driven	lean	leant	leant
eat	ate	eaten	learn	learnt	learnt
fall	fell	fallen		learned	learned
feed	fed	fed	leave	left	left
feel	felt	felt	lend	lent	lent
fight	fought	fought	let	let	let
find	found	found	lie	lay	lain

light	lit	lit	sink	sank	sunk
	lighted	lighted	sit	sat	sat
lose	lost	lost	sleep	slept	slept
make	made	made	slide	slid	slid
mean	meant	meant	speak	spoke	spoken
meet	met	met	spell	spelt	spelt
pay	paid	paid		spelled	spelled
put	put	put	spend	spent	spent
read	read	read	spread	spread	spread
ride	rode	ridden	stand	stood	stood
ring	rang	rung	steal	stole	stolen
rise	rose	risen	stick	stuck	stuck
run	ran	run	swim	swam	swum
say	said	said	swing	swung	swung
see	saw	seen	take	took	taken
sell	sold	sold	teach	taught	taught
send	sent	sent	tell	told	told
set	set	set	think	thought	thought
shake	shook	shaken	throw	threw	thrown
shine	shone	shone	understand	understood	understood
shoot	shot	shot	wake	woke	woken
show	showed	shown	wear	wore	worn
		showed	win	won	won
shut	shut	shut	wind	wound	wound
sing	sang	sung	write	wrote	written

Grammar summary

THEME A

미정대명사 ANYBODY, ANYTHING, ANY...

anybody, anything, any ...는 부정문과 의문문, 조건문에서 쓰인다.

- 의문문: Is there **anything(anybody)** there? (거기에 무엇인가(누군가) 있습니까?)
- 부정문: No, there is not **anything(anybody)** there. (아니요, 아무것도 (아무도) 없습니다.)
- 조건문: Lend me a pen, if you have **any (pens).** (펜이 있으면 하나 빌려 주시오.)

any가 긍정문에 사용되여 《어떤, 임의의》의 뜻을 표시할 때가 있다.

- **Anybody** can learn English. (누구든지 영어를 배울수 있다.)
- You can sit **anywhere** you want in this park. (당신은 이 공원에서 바라는 어느 자리에든 앉을수 있다.)

과거지속(시칭) (PAST CONTINUOUS)

과거의 일정한 순간에 지속되고있는 행동 또는 상태를 나타낸다.

was/were + -ing

- They found the graves when they **were searching** Devon Island. (그들은 데본섬을 조사하던중 묘지들을 발견하였다.)
- What **were** the sailors **doing** when they saw Franklin's ships? (그들이 프랭클린의 배들을 보았을 때 선원들은 무엇을 하고있었는가?)

시간접속사 **when**대신에 **while**을 써서 행동이 진행되고있었다는것을 나타낼수 있다.

- Franklin and his men died while they **were looking** for a route through the Arctic. (그들이 북극을 통하는 로정을 찾고있을 때 프랭클린과 그의 동료들은 죽었다.)

령(비)조건문 (조건상황부문) (ZERO CONDITIONAL): 원인과 결과

원인과 결과에 대하여 말할 때 확정적인 사실에 대하여서는 **when**을, 일어날수 있는 사실에 대하여서는 **if**를 쓸수 있다.

- **When** it rains, the sky becomes darker. (비가 올 때 하늘이 점점 어두워진다.) (확정적인 사실)
- **If** you don't go to school, you don't learn anything. (만일 동무가 학교에 가지 않는다면 아무것도 배우지 못한다.) (일어날수 있는 사실)

양태동사 (MODALS): SHOULD, MIGHT, NEED, MUST

양태동사들은 문장의 뜻을 보충해준다. **should**와 **might**, **must**다음에는 to없는 미정사가, **need**다음에는 to미정사가 쓰인다.

should (의무성): I **should** go to bed. (나는 잠을 자야 한다.)

might (가능성): I **might** go to bed after the homework. (나는 숙제를 한 후 잠잘수 있다.)

need (필요성): I **need** to go to bed. I'm very tired. (나에게는 잠이 필요하다. 몹시 피곤하니까.)

must (강한 의무성): I **must** go to bed. I'm falling asleep. (나는 꼭 자야겠다. 막 졸린다.)

양태동사 **must**의 반대뜻은 **mustn't**가 아니라 **don't have to**이다.

- I **must** go to school tomorrow, but I **don't have to** go on Sunday. (나는 래일 학교에 가야지 일요일에는 갈 필요가 없다.)

THEME B

현재완료(시칭) (PRESENT PERFECT)

현재완료는 《**have** + 과거분사》의 형태로 쓰이는데 이때 **have**동사는 주어의 인칭과 수에 따라 변한다.

수 / 인칭	단수	복수
1인칭	I have gone.	We have gone.
2인칭	You have gone.	You have gone.
3인칭	He / She / It } has gone.	They have gone.

현재완료시칭은 과거에 일어난 행동이 현재와 관련되여있다는것을 나타낸다.

① 과거에 시작된 행동의 결과가 지금까지 남아있다는것을 나타낸다.

- I **have broken** my leg. I can’t walk. (나는 다리가 부러졌다. 나는 걸을 수 없다.)
- I **have seen** that film, so I know what it is about. (나는 그 영화를 보았다. 그래서 나는 그 영화내용에 대하여 안다.)

② 과거에 시작된 행동이 현재순간에 완료되였다는것을 나타낸다. 이때 현재와 관련되는 부사 **just, now, yet, already** 등과 함께 쓰인다.

- ‘Are you hungry?’ ‘No, I’**ve just had** lunch.’ (《배고프니?》 《아니, 방금 점심을 먹었어.》)
- ‘Don’t forget to send the letter.’ ‘I’**ve already sent** it.’ (《편지를 부치는것을 잊지 말라.》 《나는 벌써 그것을 부쳤어.》)
- ‘**Has** it **stopped** raining **yet**?’ (《벌써 비가 그쳤니?》)

현재완료시칭은 현재를 포함하는 시간상황어 **today**, **this morning** (현재까지도 오전일 때), **this year** 등과도 쓸수 있다.

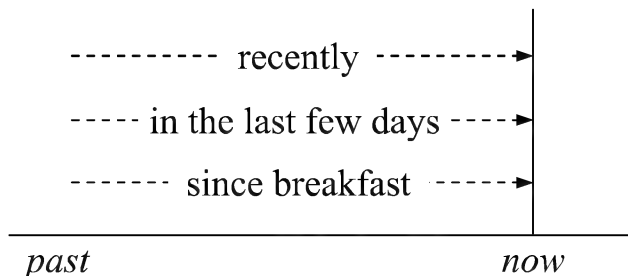
- I **have done** a lot of work **today**. (나는 오늘 많은 일을 했다.)
- I **have spent** too much time on Maths **this week**. (나는 이번주에 너무나 많은 시간을 수학공부에 바쳤다.)

※ 그러나 만일 확정적인 과거시간에 대하여 말한다면 과거단순시칭을 써야 한다.

- I **have seen** that film. I saw it last week. (나는 그 영화를 본적이 있다. 나는 그것을 지난주에 보았다.)

He **has gone** to Wonsan last year. ×

He **went** to Wonsan last year. ○ (그는 지난해에 원산에 갔다.)

③ 과거의 어느 한 순간부터 현재까지 행동 또는 상태가 계속된다는것을 나타낸다.

- **Have** you **heard** from Yong Chol **recently**? (최근 영철이한테서 소식을 들었니?)
- I'**ve met** a lot of people **in the last few days**. (나는 지난 며칠사이에 많은 사람들을 만났다.)
- I'm hungry. I **haven't eaten** anything **since breakfast** (=from breakfast until now). (나는 배고프다. 아침식사후 아무것도 먹지 못했다.)
- He **has studied** English for 6 years. (그는 영어를 6년동안 공부하였다.)

④ 과거의 어느 순간부터 현재까지의 경험을 나타낸다. 이때 **once, twice, ever, never, before, often, seldom, sometimes** 등이 함께 쓰인다.

- **'Have** you **ever been** to Pochonbo?' (been (to)=visited) 'Yes, I'**ve been** there **twice**.' (《보천보에 가본 일이 있습니까?》 《예, 나는 거기에 두번 가본 일이 있습니다.》)
- Pyongyang is the most beautiful city that I'**ve ever seen**. (평양은 지금까지 내가 본 도시중에서 제일 아름다운 도시이다.)

미래단순(시칭) (FUTURE SIMPLE)

미래단순시칭은 **will**과 함께 미래, 특히 예측을 나타낸다.

- By the year 2200, the world population **will** be 10 000 million. (2200년에 세계인구는 100억에 이를것이다.)

will은 모든 인칭에 다 쓰일수 있는데 《**will**+미정사》로 쓴다. 간략형은 **'ll**, 부정간략형은 **won't**로 쓰인다.

- I'**ll**(**will**) see him next week. I **won't** see him today. (나는 다음주에 그를 만날것이다. 오늘은 만나지 못하겠다.)
- You'**ll** be tired tomorrow. You **won't** sleep enough. (너는 래일 피곤할거야. 네가 푹 자지 못할테니까.)
- She'**ll** arrive late today. She **won't** leave on time. (그 녀자는 오늘 늦게 도착할거야. 제시간에 떠나지 못할테니까.)
- We'**ll** see you tomorrow. We **won't** see you tonight. (우리들은 너를 래일 만날거야. 오늘 밤엔 만나지 못할거야.)
- You'**ll** like that film. You **won't** like this film. (너는 그 영화를 좋아할거야. 이 영화는 좋아하지 않을거야.)
- They'**ll** come at 6.00 p.m. They **won't** stay long. (그들은 오후 6시에 올거야. 그들은 오래 머무르지 않을거야.)

shall을 **I** 또는 **we**와 함께 쓸수 있다.

- **I shall** know the results of my test tomorrow. (나는 래일 나의 시험성적을 알게 될것이다.)
- **We shall** see you next month. (우리들은 너를 다음달에 만날것이다.)

의문문에서는 보통 **shall**은 **I**와 **we**, **will**은 **he, she, it, you, they**와 함께 쓰인다.

- **Shall** I see you at the party? (내가 당신을 연회에서 만나게 될가요?)
- **Will** you come to the party? (당신은 연회에 오겠습니까?)
- **Will** he/she/it work? (그 남자(그 녀자, 그것)가 일할가요?)
- **Shall** we come back at six o'clock? (우리들이 6시에 돌아올가요?)
- **Will** you see In Su tonight? (너는 오늘밤 인수를 만나겠니?)
- **Will** they eat with us? (그들이 우리와 함께 식사를 할가요?)

현재지속시칭과 **going to**는 미래를 나타낼수 있다. 현재지속시칭은 확정적인 시간내에 수행할 계획에 대하여 말할 때 쓰일수 있다.

- I**'m** play**ing** football tomorrow afternoon. (나는 래일 오후에 축구를 할 작정이다.)
- I**'m** work**ing** on Thursday. (나는 목요일에 일을 하려고 한다.)

going to는 틀림없이 일어날 일에 대하여 말할 때 쓰일수 있다.

- Look at the sky. It**'s going to** rain! (하늘을 보라! 비가 올것 같애!)

1조건문 (가정법현재) (FIRST CONDITIONAL)

《**If + will**》 형식은 일어날수 있는 미래의 원인과 결과에 대하여 말할 때 쓰인다.

- **If** our football team wins this game, we **will** win the cup. (만일 우리 축구팀이 경기에서 이기면 우승컵을 탈것이다.)
- **If** you are in the garden, you **won't** hear the telephone. (만일 네가 정원에 있으면 전화소리를 듣지 못할것이다.)

THEME C

과거완료(시칭) (PAST PERFECT)

과거완료는 《**had**+과거분사》의 형태로 쓰이는데 이때에 **had**는 주어의 인칭과 수에 따라 변하지 않는다.

I/We/They/You/ He/She/It	had	=I'd etc. =He'd etc.	gone. seen. finished. etc.

① 과거의 어떤 행동 또는 상태가 다른 행동 또는 상태보다 앞서 일어났다는것을 나타낸다.

• When I came home last night I found that Su Mi **had cooked** the dinner. (내가 어제밤 집에 왔을 때 수미가 저녁식사를 다 지어놓았다는것을 알았다.)

② 과거의 어느 한 순간에 행동이 완료되였다는것을 나타낸다. 이때 주로 **when, after, till, by the time, as soon as** 등의 접속사가 쓰인다.

• When the sun **had risen**, we had morning exercise. (해가 솟아올랐을 때 우리는 아침체조를 하였다.)

• Before the sun set, we **had finished** the work. (해가 지기전에 우리는 그 일을 끝마쳤다.)

③ 과거의 어느 한 순간까지 행동이나 상태가 계속되였다는것을 나타낸다.

• I **had known** him for 6 years till then. (나는 그때까지 그와 6년동안 아는 사이였다.)

④ 과거의 어느 순간까지의 경험을 나타낸다.

• I knew him because I **had met** him before. (이전에 그를 만난적이 있었으므로 그를 알고있었다.)

명동사 (GERUNDS)

명동사는 현재분사와 같이 동사원형에 **-ing**를 붙여서 만든다. 현재분사는 동사와 형용사의 성질을 가지지만 명동사는 동사와 명사의 성질을 가진다. 따라서 명동사는 시칭과 상의 구분이 있고 문장안에서 주어, 보어, 술사로 될수 있으며 전치사와 함께 규정어나 상황어로 쓰인다.

상 / 시칭	능동상	피동상
미정	showing	being shown
완료	having shown	having been shown

명동사의 쓰임

① 주어로 쓰인다.

- **Reading** English magazines is a good way to improve your English. (영어잡지들을 읽는것은 동무들의 영어실력을 높이는 좋은 방법의 하나이다.)

② 술사로 쓰인다.

- Seeing is **believing**. (보는것이 믿는것이다.) (백번 듣는것보다 한번 보는것이 낫다.)

③ 보어로 쓰인다.

- I enjoy **swimming.** (나는 수영을 즐긴다.)

④ 전치사와 함께 규정어 또는 상황어로 쓰인다.

- There was no chance **of visiting** him. (그를 찾아갈 기회가 없었다.)
- Be careful **in crossing** the road. (길을 건늘 때 조심해라.)

※ 전치사다음에 동사를 놓으려면 **-ing**형식을 써야 한다.

- Instead **of using** a pen, you can use a computer. (펜대신에 너는 콤퓨터를 쓸수 있다.)
- Are you interested **in learning** about computers? (너희들은 콤퓨터를 배우는데 재미가 있니?)
- The only way you can solve the problem is **by using** a computer. (네가 그 문제를 풀수 있는 유일한 방법은 콤퓨터를 리용하는데 있다.)

THEME D

USED TO

used to는 과거에 규칙적으로 일어났지만 지금은 일어나지 않는 행동에 대하여 말할 때 쓰인다. **used to**는 모든 대명사들(**I, you, he/she/it, we, you, they**)과 함께 쓰인다.

- We **used to** play football in the park but now we play it at school. (우리는 공원에서 축구를 하군 하였지만 지금은 학교에서 한다.)
- I **used to** live in a small town. Now I live in a big city. (나는 작은 도시에서 살군 하였지만 지금은 큰 도시에서 산다.)

의문문에서는 **did**, 부정문에서는 **didn't**와 함께 쓰인다.

- Where **did** you **use to** go after school? (너는 수업이 끝난 다음 어디에 가군 하였니?)
- I **didn't use to** eat lunch at school. Now I eat there every day. (나는 학교에서 점심을 먹지 않군 하였는데 지금은 거기에서 매일 먹는다.)
- She **didn't use to** be a teacher. She used to be a doctor. (그 녀자는 교원으로 일하지 않았다. 그 녀자는 의사로 일하였다.)

부정문에서 **never**를 쓸수 있다.

- I **never used to** like Maths. Now I think it's great! (나는 수학을 전혀 좋아하지 않았다. 지금은 아주 재미있다!)
- She **never used to** go swimming. Now she swims every day. (그 녀자는 수영하러 전혀 가지 않았다. 지금은 매일 수영한다.)

관계사절 (RELATIVE CLAUSES)

관계사절은 문장의 어느 한 대상에 대하여 구체적으로 설명하게 된다. 그 대상이 관계사절에서 주어인 경우에는 **that**와 **which, who** 등이 쓰이며 대상이 사람인 경우에는 **who**를 쓴다.

- The people **who** live next door play loud music every night. (옆집에 사는 사람들은 매일 밤 음량이 높은 음악을 연주한다.)
- The teacher **who** taught us last year is in another school now. (지난해에 우리들을 가르쳤던 선생님이 지금은 다른 학교에 있다.)

그 대상이 물건인 경우 **which**를 쓴다.

- The book **which** I left on the bus is very expensive. (내가 뻐스에 놓고 내린 그 책은 매우 값비싼 책이다.)

which 또는 **who**대신에 흔히 **that**를 쓸수 있다.

- The people **that** came to school yesterday were building a swimming pool. (어제 학교에 온 사람들이 수영장을 건설하고있었다.)
- The book **that** she posted hasn't arrived yet. (그 녀자가 소포로 부친 책이 아직도 도착하지 않았다.)

whose는 **his/her/their**대신에 쓰인다.

- I met a man **whose** sister knows you. (나는 그의 누나가 너를 알고있는 한 사람을 만났다.)

관계사절에서 설명받는 대상이 보어인 경우 **who**대신에 **whom**을 쓸수 있다.

- The woman **whom** I wanted to see was away on holiday. (내가 만나고싶던 그 녀성은 휴가를 받고 떠났다.)

관계사절은 문장속에서 일정한 단어들을 규정하기도 한다.

- A dictionary is a book **which** explains the meanings of words. (사전이란 단어들의 의미를 설명하는 책이다.)
- An archaeologist is a person **who** digs up things from the past. (고고학자란 옛날것들을 파내는 사람이다.)

THEME E

분리의문문 (QUESTION TAGS)

분리의문문은 서술문뒤에 꼬리의문이 있는 의문문이다.
꼬리의문은 두개 단어 즉 하나의 동사와 하나의 대명사로 이루어진다. 꼬리의문은 보통 입말에서 쓰이는데 문장의 맨뒤에 놓여 두가지 방법으로 쓰일수 있다. 억양(올림어조 혹은 내림어조)이 중요하다.

- Her name is Un Mi, isn't it? (I am sure that's Un Mi, agree with me.)

  (그 녀자의 이름이 은미가 틀림없지요?)

  ※ 그가 은미라고 확신하는데 동의하라는 뜻

- Her name is Un Mi, isn't it? (I think that's Un Mi, correct me if I am wrong.)

  (그 녀자의 이름이 은미가 맞는지요?)

  ※ 그가 은미라고 생각하는데 혹시 틀리면 알려달라는 뜻

례문들에서 **isn't it** 를 꼬리의문이라고 한다.

꼬리의문은 문장속에서 술어동사에 따라 변하는데 대하여 주의를 돌려야 한다. 만일 술어동사가 긍정이라면 꼬리의문은 부정, 술어동사가 부정이라면 꼬리의문은 긍정으로 된다.

They aren't from Kanggye, **are they**? (그들은 강계에서 오지 않았지요?)

He lives in that house, **doesn't he**? (그는 저집에서 살지요?)

꼬리의문의 형태도 역시 변한다. 술어동사가 **be, can, have**나 양태동사들과 함께 쓰이면 꼬리의문에서 그 동사는 반복된다.

- It's a beautiful day, **isn't** it? (정말 좋은 날이지요?)
- He **can't** drive, **can** he? (그는 차를 몰수 없지요?)
- This train **will** arrive at 7.00 p.m., **won't** it? (그 기차는 오후 7시에 도착하겠지요?)

다른 모든 동사들과 함께 쓰일 때 시칭과 인칭에 따라 **do/does/did**를 써야 한다.

- That car **looks** dangerous, **doesn't** it? (저 승용차는 위험해보이지요?)
- They **live** in Hamhung, **don't** they? (그들은 함흥에서 살지요?)
- You **came** home very late last night, **didn't** you? (너는 어제밤에 집에 몹시 늦게 왔댔지?)

Let's와 함께 쓰인 꼬리의문은 **shall we**를 쓴다.

- **Let's** go to the cinema tonight, **shall we**? (오늘밤 영화보러 갈가요?)

현재피동(시칭) (PRESENT PASSIVE)

△ 쓰임

① 행동을 수행한 사람보다 행동, 상태를 강조할 때

- Thousands of trees **are planted** every day. (매일 수많은 나무들이 심어진다.)

② 공정을 나타낼 때

- The milk **is heated** and then it **is cooled** very quickly. (우유는 덥혀진 다음에 매우 빨리 식어진다.)

③ 규칙, 규정을 나타낼 때

- Eating **is** not **permitted** in the library. (도서관에서 먹는것은 허용되지 않는다.)

△ 만드는 법

현재피동(시칭)은 《**be**동사의 현재형 + 과거분사》로 만든다.

subject + present of 'be' + past participle
(주어 + **be**동사의 현재형 + 과거분사)

- The letters **are collected** at 4 p.m. (오후 4시에 편지들을 모아간다.)

Vocabulary

Unit 1

exploration /ˌekspləˈreɪʃən/ *n* 탐험，답사
monument /ˈmɒnjʊmənt/ *n* 기념비，기념탑
tour /tʊə/ *v* 돌아보다，관광려행하다 *n* 관광려행
  study tour 수학려행
battle /ˈbætl/ *n* 전투，싸움
  battle site 전적지
make a trip 간단한 려행을 하다
route /ru:t/ *n* 길，로선，항로
reminiscence /ˌremɪˈnɪsns/ *n* (흔히 *pl*) 회고록，회상기
guerrilla /gəˈrɪlə/ *n* 유격대원
get lost 길을 잃다
expedition /ˌekspɪˈdɪʃən/ *n* 탐험，원정，탐험대
reward /rɪˈwɔ:d/ *n* 보상，현상금 *v* 보수(상)를 주다
bay /beɪ/ *n* 만
  Baffin Bay 배핀만
tin /tɪn/ *n* 석；통졸임(통)
candle /ˈkændl/ *n* 양초
tobacco /təˈbækəʊ/ *n* 담배
via /ˈvaɪə/ *prep* …을 거쳐서，…을 경유하여
Arctic /ˈɑ:ktɪk/ *a* 북극의
  the Arctic 북극지방，북극해
sailor /ˈseɪlə/ *n* 선원
disease /dɪˈzi:z/ *n* 병，질병，질환
scientific /ˌsaɪənˈtɪfɪk/ *a* 과학적인
towards /təˈwɔ:dz/ *prep* …을 향하여
alive /əˈlaɪv/ *a* 살아있는，활기있는
worry /ˈwʌri/ *v* 근심시키다，걱정하다
sign /saɪn/ *n* 흔적
search /sɜ:tʃ/ *v* 탐색하다
journey /ˈdʒɜ:ni/ *n* 려행 *v* 려행하다
swallow /sˈwɒləʊ/ *v* 삼키다，삼켜버리다
Eskimo /ˈeskɪməʊ/ *n* 에스키모족 *a* 에스키모족(사람)의，에스키모어의
Inuit /ˈɪnju:ɪt/ *n* 북아메리카 에스키모족
edge /edʒ/ *n* 끝，가장자리
chance /tʃɑ:ns/ *n* 기회
initiate /ɪˈnɪʃɪeɪt/ *v* 제의하다，창시하다；시작하다
eternal /i:ˈtɜ:nl/ *a* 영원한，불멸의
march /mɑ:tʃ/ *v* 행군하다
course /kɔ:z/ *n* 길，진로
rough /rʌf/ *a* 거친，울퉁불퉁한
order /ˈɔ:də/ *v* 명령하다
crush /krʌʃ/ *v* 때려부시다
rank /ræŋk/ *n* 대오
thoughtful /ˈθɔ:tfʊl/ *a* 생각에 잠기는
tone /təʊn/ *n* 어조，말투
magnificent /mægˈnɪfɪsnt/ *a* 웅장한
represent /ˌreprɪˈzent/ *v* 표현하다
particularly /pəˈtɪkjʊləli/ *ad* 특히
symbolize /ˈsɪmbəlaɪz/ *v* 상징하다
distant /ˈdɪstənt/ *a* 먼
carry forward …을 계속해나가다
pure /pjʊə/ *a* 순결한
tradition /trəˈdɪʃən/ *n* 전통
originate /əˈrɪdʒɪneɪt/ *v* 시작하다，일으키다

cause /kɔ:z/ *a* 위업, 원인 *v* 일어나게 하다, …의 원인으로 되다
because of …때문에
sea level 바다수면, 평균해면
Norwegian /nɔ:ˈwi:dʒən/ *n* 노르웨이어, 노르웨이사람
non-Christian /ˌnʌnˈkrɪstʃən/ *n, a* 비그리스도교(의)
belong to …에게 속하다
Moluccas /məˈlʌkəz/ *n* 말루꾸제도
aboriginal /ˌæbəˈrɪdʒənəl/ *a* 원시의
aborigine /ˌæbəˈrɪdʒəˌni/ *n* 원주민, 토착동식물
undisturbed /ˌʌndɪsˈtɜ:bd/ *a* 고통받지 않는, 태연한
result /rɪˈzʌlt/ *n* 결과
as a result of …의 결과로
at home and abroad 국내외에
bark /bɑ:k/ *n* 나무껍질 *v* 나무껍질을 벗기다
bivouac /ˈbɪvʊˌæk/ *n* 숙영(지)
roast /rəʊst/ *v* 굽다
tragedy /ˈtrædʒɪdi/ *n* 비극
captain /ˈkæptɪn/ *n* (배, 비행기의) 기장, 선장; 대위
pony /ˈpəʊni/ *n* 퍼우니 (영국종 작은말)
sledge /sledʒ/ *n* 썰매
return /rɪˈtɜ:n/ *v* 돌아가다, 돌려주다 *n* 귀국 *a* 귀로의
famous /ˈfeɪməs/ *a* 유명한
hero /ˈhɪərəʊ/ *n* 영웅

Unit 2

fog /fɒg/ *n* (짙은) 안개, 연무
envelop /ɪnˈveləp/ *v* 싸다, 덮다
Atlantic /əˈtlæntɪk/ *a* 대서양의
Atlantic Ocean 대서양
triangle /ˈtraɪˌæŋgl/ *n* 3각형, 삼각주
magical /ˈmædʒɪkəl/ *a* 신기한, 마술적인
magical force 마술적인 힘
be frightened of …에 놀라다(겁을 먹다)
airship /ˈeəˌʃɪp/ *n* 비행선
successful /səkˈsesfl/ *a* 성공적인
explode /ɪkˈspləʊd/ *v* 폭발하다, 폭발시키다
flame /fleɪm/ *n* (흔히 *pl*) 불길, 화염
explode into flame 폭발하여 불타다
absolutely /ˈæbsəlu:tli/ *ad* 절대적으로
author /ˈɔ:θə/ *n* 저자
exist /ɪˌgzɪst/ *v* 존재하다
explosion /ɪksˈpləʊʒən/ *n* 폭발
hydrogen /ˈhaɪdrədʒɪn/ *n* 수소
landing station 착륙역
static electricity 정전기
freeze /fri:z/ *v* 얼다
expand /ɪksˈpænd/ *v* 확장하다
extreme /ɪkˈstri:m/ *a* 극도의
perfect /ˈpɜ:fɪkt/ *a* 완전한
perfect condition 완전한 상태
sample /ˈsæmpl/ *n* 견본
incredible /ɪnˈkredəbl/ *a* 믿을수 없는, 놀라운
lead /led/ *n* 연
poisoning /ˈpɒɪznɪŋ/ *n* 중독
closely /ˈkləʊsli/ *ad* 찬찬히
look closely at *sth.* …을 자세히 보다
effect /ɪˈfekt/ *v* 효력이 나타나게 하다 *n* 결과
make wrong decision 잘못된 결심을 내리다
run out of …을 다 써버리다

vertical /ˈvɜ:tɪkəl/ *a* 수직의
anti-clockwise /ˌæntɪˈklɒkwaɪz/ *a* 시계바늘 반대방향의
clockwise /ˈklɒkwaɪz/ *a* 시계바늘방향의
refuse /rɪˈfju:z/ *v* 거절하다
jelly /ˈdʒeli/ *n* 단묵, 젤라틴막
pilot /ˈpaɪlət/ *n* 비행사, 안내원
unusual /ˌʌnˈju:ʒʊəl/ *a* 이상한, 비범한
enormous /ɪˈnɔ:məs/ *a* 무척 큰
magnetic /mægˈnetɪk/ *a* 자석의
trick /trɪk/ *n* 꾀, 속임수, 장난
law /lɔ:/ *n* 법

Unit 3

boomerang /ˈbu:məræŋ/ *n* 부머랭 (오스트랄리아원주민의 무기)
pottery /ˈpɒtəri/ *n* 도자기류
poetry /ˈpəʊɪtri/ *n* 시문학
mythology /mɪˈθɒlədʒi/ *n* 신화학
tribe /traɪb/ *n* 종족
complex /ˈkɒmpleks/ *a* 복잡한
stay almost the same 변하지 않다
declare /dɪˈkleə/ *v* 선언하다
criminal /ˈkrɪmɪnəl/ *n* 범죄자 *a* 범죄의
far away from …에서 멀리 떨어진
stole /stəʊl/ *v* steal(도적질하다)의 과거
threat /θret/ *n* 협박, 공갈, 위협
be under threat 위협당하다
become harder and harder 점점 더 어려워지다
traditional way of life 전통적인 생활방식
outback/ˈaʊtbæk/ *n* (미개척지의) 오지, 내지
technique /tekˈni:k/ *n* 기술, 방법
predict /prɪˈdɪkt/ *v* 예측하다, 예견하다

Unit 4

frozen /ˈfrəʊzn/ *v* freeze의 과거분사 *a* (얼음이) 언, 랭동한
panic /ˈpænɪk/ *n* 공포, 당황 *a* 공포적인, 당황한
transatlantic /trænsəˈtlæntɪk/ *a* 대서양을 횡단하는
bomb /bɒm/ *n* 폭탄, 포탄
leak /li:k/ *v* 새다 *n* 루출, 새기
spark /spɑ:k/ *n* 불꽃
helmet /ˈhelmɪt/ *n* 투구
brake /breɪk/ *n* 제동기
leaflet /ˈli:flɪt/ *n* 광고
wave /weɪv/ *v* (손을) 흔들다
beard /bɪəd/ *n* 턱수염
have a beard 턱수염을 기르다
police station 경찰서
prevent /prɪˈvent/ *v* 막다, 저지하다

Unit 5

islet /ˈaɪlɪt/ *n* 작은 섬
pleasure /ˈpleʒə/ *n* 기쁨
pleasure ground 유원지
open-air /ˈəʊpənˌeə/ *a* 야외의, 바깥의
frequent /ˈfri:kwənt/ *a* 자주, 빈번히 일어나는 *v* 빈번히 다니다, 늘 모이다
environmental /ɪnˌvaɪərənˈməntl/ *a* 환경의
concept /ˈkɒnsept/ *n* 개념
ozone /ˈəʊzəʊn/ *n* 오존
ozone layer 오존층
greenhouse /ˈgri:nˌhaʊs/ *n* 온실
greenhouse effect 온실효과
in many ways 많은 방법으로
pollute /pəˈlu:t/ *v* 오염시키다
ultraviolet /ˌʌltrəˈvaɪəlɪt/ *a* 자외선의 *n* 자외선

radiation /ˌreɪdɪˈeɪʃən/ *n* 방사선
cancer /ˈkænsə/ *n* 암, 악
increase /ɪnˈkri:s/ *v* 증가하다, 늘이다
escape /ɪsˈkeɪp/ *v* 달아나다, 도망치다, 탈출하다
serious /ˈsɪərɪəs/ *a* 심중한
on certain days 일정한 날들에
opera /ˈɒp(ə)rə/ *n* 가극
alternative /ɔ:lˈtɜ:nətɪv/ *a* 대용의, 대리인의
　alternative energy 대용에네르기
nuclear /ˈnju:klɪə/ *a* 핵의, 원자력의
　nuclear power 원자력
acid rain 산성비
cell /sel/ *n* 전지; 세포
　solar cell 태양전지
wave generator 조수력발전기
wind generator 풍력발전기
biogas /ˈbaɪəʊˌgæs/ *n* 생물가스
transport for the 21st century 21세기의 운수수단
manure /məˈnjʊə/ *n* 배설물, 비료, 거름
Maglev train 자기부상렬차
magnet /ˈmægnɪt/ *n* 자석
push /pʊʃ/ *v* 밀다
　push *sth.* forward …을 앞으로 밀다
pull /pʊl/ *v* 당기다
tonne /tʌn/ *n* 톤 (t)
sulphur /sʌlfə/ *n* 류황
　sulphur dioxide 이산화류황 (아류산가스)
sulphuric /sʌlˈfjʊərɪk/ *a* 류황의
　sulphuric acid 류산
methane /ˈmi:θeɪn/ *n* 메탄
pipe /paɪp/ *n* 피리; 관
resource /rɪˈsɔ:s/ *n* 원천, 자원
　natural resources 천연자원, 자연부원
reduce /rɪˈdju:s/ *v* 줄이다
atmosphere /ˈætməsˌfɪə/ *n* 환경, 대기
levitation /ˌlevɪˈteɪʃən/ *n* 공중에 뜸
secret /ˈsi:krɪt/ *a* 비밀의
motor /ˈməʊtə/ *n* 발동기
in the same way 같은 방법으로
electromagnet /ɪˌlektrəʊˈmægnɪt/ *n* 전자석
real /rɪəl/ *a* 실지 있는

Unit 6

riverside /ˈrɪvəˌsaɪd/ *n* 강가, 강기슭
biodegradable /ˌbaɪəʊdɪˈgreɪdəbl/ *a* 세균작용으로 분해되기 쉬운
packaging /ˈpækɪdʒɪŋ/ *n* 개별포장, 포장용기
renewable /rɪˈnju:əbl/ *a* 다시 새롭게 할 수 있는
throw away 버리다
double /ˈdʌbl/ *v* 두배로 되다
save energy 에네르기를 절약하다
unnecessary /ˌʌnˈnesəs(ə)ri/ *a* 불필요한
avoid /əˈvɒɪd/ *v* 피하다
take a long time 오랜 시간이 걸리다
available /əˈveɪləbl/ *a* 리용할수 있는, 도움이 되는
disposable /dɪsˈpəʊzəbl/ *a* 한번 쓰면 버리는
agriculture /ˈægrɪˌkʌltʃə/ *n* 농업

Unit 7

do damage 피해를 주다
common /ˈkɒmən/ *a* 공동의, 공통의, 보통의 *n* 공용권, 공유권
　in common 공동으로
smog /smɒg/ *n* 연기섞인 안개
introduce /ˌɪntrəˈdju:s/ *v* 도입하다
die from …로 인하여 죽다

out of town 교외의
do shopping 물건을 사다
critic /ˈkrɪtɪk/ *n* 비평가, 평론가
cost /kɒst/ *v* 비용이 들다, 값이 (얼마) 나가다 *n* 비용, 원가
organize /ˈɔ:gəˌnaɪz/ *v* 조직하다

Unit 8

landfill /ˈlændfɪl/ *n* (낮은 땅의 지층에 묻는) 쓰레기메움처리
process /ˈprəʊses/ *n* 과정
investigate /ɪnˈvestɪgeɪt/ *v* 조사하다
pavement /ˈpeɪvmənt/ *n* 포장도로, 보도
valuable /ˈvæljʊəbl/ *a* 가치있는
preserve /prɪˈzɜ:v/ *v* 보존하다

Unit 9

orchestral /ɔ:ˈkestrəl/ *a* 관현악의
plain /pleɪn/ *a* 소박한, 꾸밈없는 *n* 벌판, 평원
taste /teɪst/ *n* 취미; 맛 *v* 맛보다, 검식하다
harp /hɑ:p/ *n* (악기) 하프
oungum *n* 어은금
violin /ˌvaɪəˈlɪn/ *n* 바이올린
accordion /əˈkɔ:djən/ *n* 손풍금
flute /flu:t/ *n* 훌류트
kayagum *n* 가야금
trumpet /tˈrʌmpɪt/ *n* 트럼페트
paean /ˈpi:ən/ *n* 송가, 찬가
star /stɑ:/ *n* 별; (영화 등의) 주인공, 인기배우
  morning star 새별
compose /kəmˈpəʊz/ *v* 작곡하다
troupe /tru:p/ *n* (예술인 등의) 한패, 일단
  art troupe 예술단
perform /pəˈfɔ:m/ *v* 진행하다, 수행하다; 공연하다, 연주하다
poet /ˈpəʊɪt/ *n* 시인
popular /ˈpɒpjʊlə/ *a* 대중의, 대중적인; 인기가 있는
reflect /rɪˈflekt/ *v* 반사하다; 반영하다, 나타내다
ardent /ˈɑ:dnt/ *a* 열렬한
desire /dɪˈzaɪə/ *v* 간절히 요구하다, 바라다, 원하다 *n* 념원, 소원
lodestar /ˈləʊdstɑ:/ *n* 향도성
disperse /dɪsˈpɜ:s/ *v* (구름, 안개 등을) 사라지게 하다
darkness /ˈdɑ:knɪs/ *n* 어둠
call forth 불러내다, 불러일으키다
dawn /dɔ:n/ *n* 새벽
liberation /ˌlɪbəˈreɪʃən/ *n* 해방
immortal /ɪˈmɔ:tl/ *a* 불멸의
overjoyed /ˌəʊvəˈdʒɒɪd/ *a* 몹시 기뻐하는
emotion /ɪˈməʊʃən/ *n* 감격
legendary /ˈledʒənd(ə)ri/ *a* 전설적인
creative /kri:ˈeɪtɪv/ *a* 창조적인
symphony /ˈsɪmfəni/ *n* 교향곡
orchestra /ˈɔ:kɪstrə/ *n* 관현악
performance /pəˈfɔ:məns/ *n* 수행, 실행; 공연, 연주
chorus /ˈkɔ:rəs/ *n* 합창(곡)
vigour /ˈvɪgə/ *n* 힘, 활력
  with vigour 힘차게
foundation /faʊnˈdeɪʃən/ *n* 기초, 터전
democracy /dɪˈmɒkrəsi/ *n* 민주주의
paradise /ˈpærədaɪs/ *n* 락원
creditably /ˈkredɪtəbli/ *ad* 훌륭하게
implement /ˈɪmplɪment/ *v* (약속 등을) 리행하다, 만족시키다
yearn /jɜ:n/ *v* 그리워하다, 동경하다
respect /rɪsˈpekt/ *v* 소중히 여기다, 존

경하다, 존중하다
cantata /kænˈtɑ:tə/ *n* 칸타타 (성악곡형식)
ensemble /ɑ:(n)ˈsɑ:(m)bl/ *n* 안삼불, 합주
style /staɪl/ *n* 양식
mid /mɪd/ *n* 중앙, 중간
factionalist /ˈfækʃənəlɪst/ *n* 종파분자
evil /ˈi:vl/ *a* 흉악한
scheme /ski:m/ *n* 음모, 책동
resound /rɪˈzaʊnd/ *v* 울려퍼지다
loyalty /ˈlɒɪ(ə)lti/ *n* 충실성
achievement /əˈʧɪ:vmənt/ *n* 업적, 공적
virtue /ˈvətju:/ *n* 덕성
glorious /ˈglɔ:rɪəs/ *a* 영광스러운
sincere /sɪnˈsɪə/ *a* 진실한, 마음속으로부터의
absolute /ˈæbsəlu:t/ *a* 절대적인
worship /ˈwɜ:ʃɪp/ *n* 숭배, 경모, 존경
will /wɪl/ *n* 의지, 결심, 결의
look up to …를 우러러보다(존경하다)
wide-ranging /waɪdˈreɪndʒɪŋ/ *a* 넓은 범위에 미치는, 변화가 많은
vigorous /ˈvɪg(ə)rəs/ *a* 강렬한, 힘찬
tune /tju:n/ *n* 곡, 선률
representative /ˌreprɪˈzentətɪv/ *n* 표현하는, 상징하는
pluck /plʌk/ *n* 용기, 담력
resourcefulness /rɪˈsɔ:sfʊlnɪs/ *n* 지략
joyous /ˈdʒɒɪəs/ *a* 매우 기쁜, 환희로운
vivid /ˈvɪvɪd/ *a* 강렬한, 뚜렷한; 활발한
presentation /pˌrezənˈteɪʃən/ *n* 제시; 표현
acclaim /əˈkleɪm/ *v* (환호로) 맞이하다, 환호(갈채)하다
genuine /ˈdʒenjʊɪn/ *a* 진실한, 진정한
era /ˈɪərə/ *n* 시대
banner /ˈbænə/ *n* 기발, 기치
encourage /ɪnˈkʌrɪdʒ/ *v* 고무하다, 격려하다
progressive/prə(ʊ)gˈresɪv/ *a* 전진하는, 진보적인
strive /straɪv/ *v* 애쓰다, 힘쓰다, 분투하다
hasten /ˈheɪsn/ *v* 재촉하다, 다그치다
prosperous /pˈrɒsp(ə)rəs/ *a* 번영하는, 부유한
powerful /ˈpaʊəfʊl/ *a* 힘센, 강력한
a great, prosperous and powerful nation 강성대국
reunification /ri:ˌju:nɪfɪˈkeɪʃən/ *n* 통일
folk song 민요
lyric /ˈlɪrɪk/ *a* 서정의, 서정시의; 음악적인
light music 경음악
guide /gaɪd/ *n* 안내서 *v* 안내하다, 지도하다
enthusiasm /ɪnˈθju:zɪˌæzm/ *n* 감격, 열광
admiration /ˌædməˈreɪʃən/ *n* 감탄, 찬양, 경모
undying /ˌʌnˈdaɪŋ/ *a* 불멸의, 영원한
faithful /ˈfeɪθfʊl/ *a* 충실한, 성실한
scatter /sˈkætə/ *v* 뿌리다, 흩어지다
stage /steɪdʒ/ *v* 상연하다 *n* 무대, 단계; 층
rename /ˌrɪˈneɪm/ *v* …의 이름을 고치다
fan /fæn/ *n* 열렬한 애호가
Wujiazi *n* 오가자 (지명)
technical /ˈteknɪkəl/ *a* 기술적인, 전문적인
award /əˈwɔ:d/ *v* (상품 등을) 주다, 수여하다 *n* 상품, 영예
studio /ˈstju:dɪəʊ/ *n* 사진촬영실, 록음실
remix /ri:ˈmɪks/ *v* 다시 하나로 만들다
hint /hɪnt/ *n* 암시, 실머리 *v* 암시하다, 넌지시 말하다
synthesizer /ˈsɪnθɪˌsaɪzə/ *n* 합성기, 신세사이자
drum /drʌm/ *n* 북

drum set 북일식, 북세트
live /laɪv/ *a* 활기있는, 생기발랄한
band /bænd/ *n* 집단; 악단
profile /ˈprəʊfaɪl/ *n* 인물소개; 측면, 륜곽
commercial /kəˈmɜːʃəl/ *a* 상업의; 무역상의; 광고용의
analyse /ˈænəˌlaɪz/ *v* 분석하다
compact disc 콤팩트디스크, CD판
interest /ˈɪntrɪst/ *n* 리익, 리윤
category /ˈkætɪgəri/ *n* 종류, 분류
heading /ˈhedɪŋ/ *n* 표제, 제목, 표제글
string /strɪŋ/ *n* 끈; (악기의) 현, 줄
percussion /pəˈkʌʃən/ *n* 충격, 《음악》 악기를 쳐서 소리를 내는것, 타악기
xylophone /ˈzaɪləˌfəʊn/ *n* 목금
bass /beɪs/ *n* 저음
double bass 콘드라바스 (=contrabass)
saxophone /ˈsæksəˌfəʊn/ *n* 색스폰

Unit 10

screen /skriːn/ *n* 영사막; 영화, 영화계
revolutionary film 혁명영화
TV serial 텔레비존련속극
documentary /ˌdɒkjʊˈment(ə)ri/ *a* 문서의, (영화, TV등의) 기록하는 *n* 문건, 기록영화
documentary film 기록영화
science film 과학영화
feature film 예술영화
squirrel /skˈwɪrəl/ *n* 다람쥐
hedgehog /ˈhedʒ(h)ɒg/ *n* 고슴도치
rear /rɪə/ *n* 등뒤, 배후
enemy rear 적후
description /dɪsˈkrɪpʃən/ *n* 서술
scout /skaʊt/ *n* 척후병, 정찰병; 정찰
bravely /ˈbreɪvli/ *ad* 용감하게, 훌륭히
defend /dɪˈfend/ *v* 지키다
writer /ˈraɪtə/ *n* 작가
director /dɪˈrektə/ *n* 지휘자; 연출가
director of photography 촬영가
designer /dɪˈzaɪnə/ *n* 설계자, 미술가
producer /prəˈdjuːsə/ *n* (영화 등의) 제작자, 생산자
contact /ˈkɒntækt/ *v* 접촉시키다, 접촉하다
script /skrɪpt/ *n* 대본
responsible /rɪsˈpɒnsəbl/ *a* 책임이 있는
make-up /ˈmeɪˌkʌp/ *n* 분장, 화장품
in charge of …을 담당하고있는
operator /ˌɒpəˈreɪtə/ *n* 교환수; (기계의) 조종자
casting /ˈkɑːstɪŋ/ *n* 배역
main actor 주인공
supporting /səˈpɔːtɪŋ/ *a* 지지하는
editor /ˈedɪtə/ *n* 편집원
convince /kənˈvɪns/ *v* 확신시키다, 납득시키다
distribute /dɪsˈtrɪbjuːt/ *v* 나누어주다, 배포하다
artist /ˈɑːtɪst/ *n* 예술가
transparent /trænsˈpærənt/ *a* 투명한
celluloid /ˈseljʊlɒɪd/ *n* 영화필림
recording studio 록음실
zoom /zuːm/ *v* 확대(축소)하다
project /ˈprɒdʒekt/ *v* 영사하다, 비치다
storm /stɔːm/ *n* 폭풍
violent /ˈvaɪələnt/ *a* 맹렬한, 격렬한

Unit 11

peaceful /ˈpiːsfʊl/ *a* 평화로운
massacre /ˈmæsəkə/ *n* 대학살, 만행, 대참상
independent /ˌɪndɪˈpendənt/ *a* 독립의, 자립의

reservation /ˌrezəˈveɪʃən/ *n* 지정거주지, 원주민들이 사는 곳; 예약
lay bare 폭로하다, 드러내다
Sioux /su:/ *n* 쑤족
invasion /ɪnˈveɪʒən/ *n* 침입
occupation /ˌɒkjʊˈpeɪʃən/ *n* 강점
organization /ˌɔ:gənaɪˈzeɪʃən/ *n* 조직, 구성
consonant /ˈkɒnsənənt/ *n* 자음
double consonant 2중자음
punctuation /ˌpʌŋ(k)tjʊˈeɪʃən/ *n* 구두법

Unit 12

stunt /stʌnt/ *a* 아슬아슬한 재주, 교예비행
stunt actor 교예배우
hurt /hɜ:t/ *v* 아프다, 다치다
employ /ɪmˈplɒi/ *v* 채용하다, 고용하다
specialize /sˈpeʃəˌlaɪz/ *v* 전문화하다
injure /ˈɪndʒə/ *v* 상처를 입히다
watch a video 록화물을 보다
play button 시동단추
combine /kəmˈbaɪn/ *v* 결합시키다

Unit 13

labour /ˈleɪbə/ *n* 로동
female /ˈfi:meɪl/ *n* 녀성; 암컷 *a* 녀성의
earn /ɜ:n/ *v* 벌다, 얻다
political /pəˈlɪtɪkəl/ *a* 정치의, 정치에 관한
publish /ˈpʌblɪʃ/ *v* 발표하다, (법령 등을) 발포하다
deputy /ˈdepjʊti/ *n* 대리인, 대의원
assembly /əˈsembli/ *n* 회의, 의회, 하원
title /ˈtaɪtl/ *n* 표제, 칭호, 학위, 명칭
society /səˈsaɪəti/ *n* 사회
industrialization /ɪnˌdʌstrɪəlaɪˈzeɪʃən/ *n* 공업화
rural /ˈrʊərəl/ *a* 농촌의, 시골의
vote /vəʊt/ *n* 투표 *v* 투표하다
right to vote 투표권
decision /dɪˈsɪʒən/ *n* 결정, 결심, 결의
make decision 결심하다
waste /weɪst/ *v* 랑비하다, 막 쓰다
average /ˈævərɪdʒ/ *n* 평균 *a* 평균의
urban /ˈɜ:bən/ *a* 도시의, 시내의
straw-thatched house 초가집
status /sˈteɪtəs/ *n* 지위, 신분
Crete /kri:t/ *n* 크리트(섬)
expect /ɪksˈpekt/ *v* 기대하다
lovely /ˈlʌvli/ *a* 사랑스러운
catalogue /ˈkætələg/ *n* 목록
purple /ˈpɜ:pl/ *a* 자주빛의
messy /ˈmesi/ *a* 란잡한
prince /prɪns/ *n* 태자, 왕자
manufacturer /ˌmænjʊˈfæktʃərə/ *n* 제작자
logical /ˈlɒdʒɪkəl/ *a* 론리적인
advertisement /ədˈvɜ:tɪsmənt/ *n* 광고, 선전; 공시, 통보
male /meɪl/ *a* 남성의
step by step 점차, 착실하게
comment /ˈkɒment/ *n* 론평 *v* 주해를 붙이다
constant /ˈkɒnstənt/ *a* 꾸준한
experience /ɪksˈpɪərɪəns/ *n* 경험, 체험

Unit 14

introduction /ˌɪntrəˈdʌkʃən/ *n* 안내서, 개론
perception /pəˈsepʃən/ *n* 지각, 리해, 식별
misunderstand /ˌmɪsʌndəˈstænd/ *v* 잘못 리해하다
optical /ˈɒptɪkəl/ *a* 광학의, 시각의
illusion /ɪˈlu:ʒən/ *n* 착각, 환상, 환각
optical illusion 시각적인 착각

diagonally /daɪˈægənəli/ *ad* 대각선으로
connection /kəˈnekʃən/ *n* 련결
sense /sens/ *n* 감각, 촉각
make sense 뜻이 통하다
make sense of …을 감수하다, …의 의미를 리해하다
unconnected /ˌʌnkəˈnektɪd/ *a* 련결되지 않은
mirage /ˈmɪrɑ:ʒ/ *n* 신기루, 허망한 꿈, 망상
bend /bend/ *v* 구부리다, 기울이다
rule /ru:l/ *n* 통치
cowboy /ˈkaʊbɒi/ *n* 목동
dream /dri:m/ *n* 꿈 *v* 꿈꾸다
pleasant /ˈpleznt/ *a* 유쾌한
diagonal /daɪˈægənl/ *a* 대각선의 *n* 대각선, 빗선
recognize /ˈrekəgˌnaɪz/ *v* 알아차리다
patient /ˈpeɪʃənt/ *n* 환자
hemisphere /ˈhemɪsfɪə/ *n* 반구체, (대뇌)반구
Broca /brɒˈkɑ:/ *n* 브로카(프랑스의 뇌수학자)
right-handed /raɪtˈhændɪd/ *a* 오른손잡이의, 오른쪽으로 도는
left-handed /leftˈhændɪd/ *a* 왼손잡이의; 서투른
nerve /nɜ:v/ *n* 신경
neuron /ˈnjʊərɒn/ *n* 신경세포

Unit 15

homogeneous /ˌhɒmə(ʊ)ˈdʒi:nɪəs/ *a* 단일의, 하나의, 동종의
come into being 생겨나다
colonial /kəˈləʊnjəl/ *a* 식민지의
century /ˈsentʃʊri/ *n* 100년, 1세기
half a century 반세기
view /vju:/ *n* 견해
religious /rɪˌlɪdʒəs/ *a* 종교의
religious belief 종교적신앙
descendant /dɪˈsendənt/ *n* 후손, 자손
origin /ˈɒrɪdʒɪn/ *n* 근원, 원천; 태생, 출신
principle /ˈprɪnsɪp(ə)l/ *a* 주되는 *n* 원리, 원칙
proposal /prəˈpəʊzəl/ *n* 방안, 제안
confederal /kənˈfed(ə)rəl/ *a* 련방의
define /dɪˈfaɪn/ *v* 정의하다
charter /ˈtʃɑ:tə/ *n* 헌장, 대헌장
task /tɑ:sk/ *n* 일, 임무, 과업
pioneer /ˌpaɪəˈnɪə/ *v* 개척하다
achieve /əˈtʃi:v/ *v* 이루다, 달성(성취)하다, 목적을 이루다
declaration /ˌdekləˈreɪʃən/ *n* 선언
seasoned /ˈsi:znd/ *a* 숙련된, 로련한
nonnative /ˌnɒnˈneɪtɪv/ *a* 본국태생이 아닌
Hispanic /hɪsˈpænɪk/ *a* 에스빠냐의, 라틴아메리카주의
percentage /pəˈsentɪdʒ/ *n* 100분률(비); 률, 비률
ancestor /ˈænsestə/ *n* 조상
European /ˌjʊərəˈpi:ən/ *n* 유럽사람
Irish /ˈaɪ(ə)rɪʃ/ *a* 아일랜드의
melting pot 도가니; 여러 인종이 뒤섞인 나라(도시) (특히 미국)
slavery /ˈsleɪvəri/ *n* 노예, 노예제도
humanity /hju:ˈmænəti/ *n* 인간성, 사람다움, 인류
crime against humanity 반인륜적범죄
property /ˈprɒpəti/ *n* 재산
minimal /ˈmɪnɪməl/ *a* 최소의
punish /ˈpʌnɪʃ/ *v* 처벌하다
destiny /ˈdestɪni/ *n* 운명
overseas /ˌəʊvəˈsi:z/ *a* 해외의

compatriot /kəmˈpætrɪət/ *n* 동포, 겨레
fatherland /ˈfɑ:ðəˌlænd/ *n* 조국

Unit 16

gradual /ˈgrædjʊəl/ *a* 점차적인, 점점 올라가는
human /ˈhju:mən/ *n*, *a* 사람(의), 인간(의)
logic /ˈlɒdʒɪk/ *n* 론리(학); 조리, 옳은 판단
sequence /ˈsi:kwəns/ *n* 련속; 순서, 차례
analysis /əˈnæləsɪs/ *n* 분석, 분해; 해석
however /haʊˈevə/ *ad* 아무리 …해도, 어떤 방법으로든지; 도대체 어떻게 *conj* 그렇지만, 그러나
incomplete /ˌɪnkəmˈpli:t/ *a* 불완전한, 불충분한
note pad /ˈnəʊt ˌpæ(:)d/ *n* 기록판
isolated /ˈaɪsə(ʊ)ˌleɪtɪd/ *a* 고립된, 유리된
timber /ˈtɪmbə/ *n* 통나무
calculator /ˈkælkjʊleɪtə/ *n* 계산기
mathematical /ˌmæθ(ə)ˈmætɪkəl/ *a* 수학의, 수학적인; 매우 정확한
misunderstand /ˌmɪsʌndəˈstænd/ *v* 오해하다, 잘못 생각하다

Unit 17

headline /ˈhedlaɪn/ *n* 표제 *v* 표제를 달다; 널리 알려지게 하다
staff /stɑ:f/ *n* 직원
murder /ˈmɜ:də/ *n* 살인
economics /ˌi:kəˈnɒmɪks/ *n* 경제학
correspondent /ˌkɒrɪˈspɒndənt/ *n* 통신원, 특파원
politician /ˌpɒlɪˈtɪʃən/ *n* 정치가; 책략가
popular footballer 인기있는 축구선수
recovery /rɪˈkʌvəri/ *n* 회복
tragic /ˈtrædʒɪk/ *a* 비참한, 비극의
eruption /ɪˈrʌpʃən/ *n* (화산의) 폭발
volcanic eruption 분화
unfamiliar /ˌʌnfəˈmɪljə/ *a* 익숙하지 못한
altitude /ˈæltɪˌtju:d/ *n* 높이, 고도; 해발(고도)
sickness /ˈsɪknɪs/ *n* 병
broadcast /ˈbrɔ:dˌkɑ:st/ *v* 방송(방영)하다 *n* 방송, 방송순서
lucky /ˈlʌki/ *a* 행운의, 운수가 좋은
experience /ɪksˈpɪərɪəns/ *n* 경험, 체험
journalist /ˈdʒɜ:nəlɪst/ *n* 신문잡지기자
amazing /əˈmeɪzɪŋ/ *a* 놀라운

Unit 18

popularity /ˌpɒpjʊˈlærəti/ *n* 대중성, 통속성, 인기
equator /ɪˈkweɪtə/ *n* 적도
ordinary /ˈɔ:dɪnri/ *a* 보통의, 평범한
internet /ˈɪntəˌnet/ *n* 인터네트
rotate /rəʊˈteɪt/ *v* 회전하다
orbit /ˈɔ:bɪt/ *n* 궤도 *v* 궤도를 따라 돌다
antenna /ænˈtenə/ *n* 안테나
position /pəˈzɪʃən/ *n* 위치
transmit /trænzˈmɪt/ *v* 송신하다, 보내다, 전송하다
approximately /əˈprɒksɪmətli/ *ad* 거의, 대체로
battery /ˈbætəri/ *n* 치는것; 한조의 기구; 전지
navigation /ˌnævɪˈgeɪʃən/ *n* 항해, 항공
postcode /ˈpəʊstˌkəʊd/ *n* 우편번호
definition /ˌdefɪˈnɪʃən/ *n* 정의
postal /ˈpəʊstəl/ *a* 우편의, 우편국의
in a postal address 우편주소에
axis /ˈæksɪs/ *n* 축, 주축; 중심부

cellular /ˈseljʊlə/ *a* 세포의, 세포질의
stereo /ˈsterɪoʊ/ *n* 립체음악, 립체효과
forbid /fəˈbɪd/ *v* 금지하다
automatic /ˌɔ:təˈmætɪk/ *a* 자동적인
mobile /ˈməʊbaɪl/ *a* 가동의, 이동의
mobile phone 이동전화, 손전화
network /ˈnetˌwɜ:k/ *n* (라지오, TV) 방송망, (콤퓨터)망

Unit 19

the BBC (British Broadcasting Corporation) 영국방송협회
British /ˈbrɪtɪʃ/ *a* 영국의, 영국사람의 *n* 영국사람
roughly /ˈrʌfli/ *ad* 대충, 거칠게
licence /ˈlaɪsns/ *n* 허가, 면허 *v* 허가하다, 허락하다
licence money 허가비
exceed /ɪkˌsi:d/ *v* 초파하다
expenditure /ɪksˈpendɪtʃə/ *n* 지출, 소비
auntie /ˈɑ:nti/ *n* 보수적인 기관 (특히 BBC)
operation /ˌɒpəˈreɪʃən/ *n* 조작, 운영
annual /ˈænjʊəl/ *a* 해마다의
budget /ˈbʌdʒɪt/ *n* 예산
development /dɪˈveləpmənt/ *n* 발전, 발달; 개발
presentation /ˌprezənˈteɪʃən/ *n* 현시
special robotic camera 특수로보트사진기
automatically /ˌɔ:təˈmætɪkəli/ *ad* 자동적으로
protective /prəˈtektɪv/ *a* 보호하는, 방어하는, 지키는
portable /ˈpɔ:təbl/ *a* 들고 다닐수 있는, 휴대용의
medication /ˌmedɪˈkeɪʃən/ *n* 약물; 약물치료; 약물처리
armoured /ˈɑ:məd/ *a* 장갑한
vehicle /ˈvi:ɪkl/ *n* 운수수단, 차
armoured vehicle 장갑차
sightseeing /ˈsaɪtˌsi:ɪŋ/ *n* 구경, 관광, 유람
grandchildren /ˈgrændˌtʃɪldrən/ *n* 손자(녀)들
constant /ˈkɒnstənt/ *a* 부단한, 항구적인
renovation /ˌrenə(ʊ)ˈveɪʃən/ *n* 혁신, 갱신, 개혁; 수리
afford /əˈfɔ:d/ *v* …의 여유가 있다, 제공하다
heritage /ˈherɪtɪdʒ/ *n* 유산
vandalism /ˈvændəlɪzəm/ *n* (문화예술의) 파괴
destroy /dɪsˈtrɔɪ/ *v* 파괴하다
spread /spred/ *v* 퍼지다, 펼치다
value /ˈvælju:/ *n* 가치, 값; 가격
urgent /ˈɜ:dʒənt/ *a* 긴급한, 절박한
restore /rɪˈstɔ:/ *v* 복구하다, 재건하다
vandal /ˈvædəl/ *n* (문화예술의) 파괴자
expert /ˈekspɜ:t/ *n* 전문가
guard /gɑ:d/ *n* 경비원, 호위병, 근위대
patrol /pəˈtrəʊl/ *n* 순찰 *v* 순찰하다
install /ɪnsˈtɔ:l/ *v* 설치하다
Syracuse /ˈsɪrəˌkju:s/ *n* 씨라꾸자 (지명)
crown /kraʊn/ *n* 왕관
Archimedes /ˌɑ:kɪˈmi:dɪz/ *n* 아르키메데스
silver /ˈsɪlvə/ *n* 은
Archimedean /ˌɑ:kɪˈmi:dɪən/ *a* 아르키메데스의
Archimedean Principle 아르키메데스법칙
mathematician /ˌmæθ(ə)məˈtɪʃən/ *n* 수학자
physicist /ˈfɪzɪsɪst/ *n* 물리학자
transmitter /tˌrænzˈmɪtə/ *n* 전달자; 송화기; 송신기
gramophone /ˈgræməˌfəʊn/ *n* 축음기

glow lamp 백열등
inventor /ɪnˈventə/ *n* 발명가, 창안자

Unit 20

location /lə(ʊ)ˈkeɪʃən/ *n* 위치, 장소
meteor /ˈmi:tjə/ *n* 운석, 별찌
imaginary /ɪˈmædʒɪn(ə)ri/ *a* 상상의, 가상의, 공상의
president /ˈprezɪdənt/ *n* 대통령, 주석; 총장, 학장
coincidence /kəʊˈɪnsɪdəns/ *n* 동시에 일어남
twin /twɪn/ *n* 쌍둥이의 하나, 쌍둥이 *a* 쌍둥이의, 한쌍의
adventure /ədˈventʃə/ *n* 모험
exciting adventure 흥분시키는 모험
alkali /ˈælkəˌlaɪ/ *n* 알카리, 가성소다
mixture /ˈmɪkstʃə/ *n* 혼합, 뒤섞임; 혼합물
pulp /pʌlp/ *n* 종이원료
sodium carbonate 탄산소다 (탄산나트리움)
waterproof /ˈwɔ:təpru:f/ *n* 방수제, 비옷 *a* 방수의, 물이 스며들지 않는
furnace /ˈfɜ:nɪs/ *n* 로, 용광로
melted glass 유리물
mould /məʊld/ *n* 형타
shape /ʃeɪp/ *n* 모양
compressed air 압축공기
referee /ˌrefəri:/ *n* 심판원, 감독
develop a photograph 사진을 현상하다
print /prɪnt/ *v* 찍다, 인쇄하다; (사진을) 인화하다
enlarger /ɪnˈlɑ:ʒə/ *n* 확대기
photographic paper 인화지

Unit 21

monster /ˈmɒnstə/ *n* 괴물
sonar /ˈsəʊnɑ:/ *n* 수중(음파)탐지기, 잠수함탐지기
attempt /əˈtem(p)t/ *v* 시도하다, 공격하다 *n* 시도, 기도, 노력
solution /səˈlu:ʃən/ *n* 해명, 해결; 대답
icehouse /ˈaɪshaʊs/ *n* 얼음실, 얼음창고
cheaply /ˈtʃi:pli/ *ad* 싸게, 값눅게; 눅거리로
calculation /ˌkælkjʊˈleɪʃən/ *n* 계산; 예측
relative /ˈrelətɪv/ *a* 관계가 있는, 관계의 *n* 친척
misty /ˈmɪsti/ *a* 안개가 짙은, 안개자욱한
ban /bæn/ *n* 금지령; 반대 *v* 금지시키다
approach /ˈəprəʊtʃ/ *v* 접근하다
council /ˈkaʊnsl/ *n* 회의, 협의, 협회, 협의회
scanner /ˈskænə/ *n* 《콤퓨터》 스캐너, 주사장치
extinction /ɪksˈtɪŋ(k)ʃən/ *n* 사멸, 소멸
subspecies /səbˈspi:si:z/ *n* 《생물》 (분류학상의) 아종
southern /ˈsʌðən/ *a* 남쪽의, 남부지방의